The Metamorphosis Project Journal

VOX

Cartographies of Voice and Power

02 Issue 2025

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Issue 02, 2025

Acknowledgements

We acknowledge the many Traditional Custodians of Country throughout Australia and honour their Elders past and present.
We respect their enduring connection to their lands, waterways and surrounding clan groups since time immemorial. We cherish the richness of Aboriginal artistic and cultural expressions. The Metamorphosis Project is located on Whadjuk Noongar Land.

The Metamorphosis Project Issue 02 is generously supported by A-1 Engineering, the Forrest Research Foundation and the Centre for Entrepreneurial Research and Innovation (CERI).

The Metamorphosis Project

The Metamorphosis Project is a transdisciplinary platform that fosters ideas and creative experimentation at the intersection of art and research. Our work brings together artists, researchers, writers and practitioners to interrogate urgent contemporary questions through our publications, events and exhibitions.

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the metamorphosis project

Editorial Team

Jennifer Halton
Editor-in-Chief

As the Founder and Creative Director of The Metamorphosis Project, Jennifer leads the project's vision, research, and artistic and editorial programming. She holds a PhD in Cultural Musicology and her current research explores the liminality and intersectionality of art, research and social innovation. She is also the Director of Internationalisation at WAAPA, ECU.

Thomas Brady
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Thomas Brady is an urban designer, planner and artist with cross-discplinmary education in both architecture and planning. His work emphasizes creating resilient and sustainable urban environments. Passionate about community-led co-design, he explores how collaborative design and novel design communication methodologies can shape city policy for public good.

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Clare Reid is the newly appointed CEO of Lush, with a background in brand strategy and feature writing. Experienced in communications, she has worked with clients like UWA, Amazon Web Services, and the Aboriginal Cultural Centre. A published writer and workshop leader, Clare holds a Master's degree in Creative Writing.

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Professor James Arvanitakis is the renound Director of the Forrest Research Foundation, promoting early career researchers in Western Australia. A Fulbright alumnus and recipient of multiple awards, including the Prime Minister's University Teacher of the Year, he founded Respectful Disagreements and serves on various boards, including the Perth Festival.

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Daniel Giuffre is a designer, artist, researcher, and educator at Curtin University with a Master's in Architecture. Co-founder of Intensive Fields, he specializes in generative design and fabrication technologies. Daniel fosters innovation through cross-disciplinary collaborations in public art and architecture and lectures on design, technology, and automation.

Lindsay Vickery
Editor for Music & Composition

Lindsay Vickery is a composer, performer, and academic whose work explores score presentation, musical structure, and the intersection of electronic and acoustic music. A soloist and collaborator with Decibel New Music, he has toured internationally for 25 years. He co-edited Actions | Remarks and teaches at Edith Cowan University.

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Shauna Kelly is Coordinator of Administration and Communications at Creative Futures Academy in Ireland. With an MA in Art History from University College Dublin, she has over 10 years' experience in the Arts sector, working for organisations like IMMA, the National Gallery of Ireland, and the World Crafts Council Europe, managing complex, multi-partner projects.

Dennis Power

Editor for Science

Dennis Power is a synthetic organic chemist with a BSc (Honours) from the University of Western Australia. During his postgraduate studies Dennis spoke on the global stage of TEDx UWA and worked abroad at the prestigious Leibniz Institute for Catalysis in Rostock, Germany. Four years of a PhD exploring nickel catalysis led Dennis to discover his talent for science communications.

Paul Maginn

Editor for People, Place, Policy and Politics

Associate Professor Paul Maginn is the Director of the UWA Public Policy Institute and coordinates the Administration and Governance stream of the Masters of Public Policy at UWA. An urban planner and geographer, he has co-edited several books, including Suburbia in the 21st Century (2022), and is Editor-in-Chief of Urban Policy and Research.

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Contributers

Jennifer Halton

As Founder and Creative Director of The Metamorphosis Project (2015-present), Jennifer leads the project's vision, research, and artistic and editorial programming. She is also the Director of Internationalisation at the Western Australian Academy of Performing Arts (WAAPA) at Edith Cowan University. Jennifer holds a PhD in Cultural Musicology, focusing on music and visual culture in early modern Europe. Specifically, her research examines the cultural politics and performativity of Renaissance festivals. Currently, her work explores the liminality and intersectionality of art, research, and social innovation. Additionally, she serves on the Board of Directors for Regional Arts Western Australia (RAWA) and the Centre for Entrepreneurial Research and Innovation (CERI). Through these roles, she continues to foster interdisciplinary dialogue and champion the integration of creative and academic practices.

Lauren Fane

Lauren Fane is an architectural practitioner based in Kalamunda [cala-munnda], on Noongar Country. Her work engages with design, advocacy and cultural collaboration across government, private and educational contexts. Drawing on experience in design review, policy and creating supportive housing, community places and public art, she sees architecture and art as tools for civic dialogue. Her practice is guided by the belief that collaborative design can amplify underrepresented voices, of both people and place.

Mariela Espino Zuppa

Mariela Espino Zuppa is a Mexican writer and cultural facilitator based on Noongar Country. Her practice is shaped by her connection to Mexico and her ongoing work alongside First Nations communities throughout Australia. Through writing, storytelling, and community practice, Mariela cultivates spaces of care and exchange, bridging distances between here and there, us and them.

Ayo Busari

Mohammed 'Ayo Busari' (he/him) is an award-winning Creative Producer, Curator, Musician, Visual Artist, Writer, Performer, and Support Worker based in Boorloo (Perth). He holds a BA (Hons) in Journalism & Media from the University of Hertfordshire (UK) and a Master of Arts in Screen Arts from Curtin University. Ayo's interdisciplinary practice spans photography, music, film, theatre, writing, and community arts, rooted in memory, cultural storytelling, and emotional resonance. He creates bold, immersive works that often fuse spoken word, live music, and movement, reflecting his commitment to poetic and collaborative expression. He is the co-founder of The Outsiders, and founder of Blue Joy Theatre Co., supporting early-career artists through development programs and new work production. In music, Ayo is the co-frontman of TAB Family, an Afro-fusion and alt-pop group that won the 2025 FRINGE WORLD Award in the Music and Musicals categories. His visual, print, and sound works have been featured at Moores Building Art Space, Cool Change Contemporary, and The Blue Room Theatre, and published in Pulch Mag, Grok Magazine, Lucid Lemons, and Native Mag. Ayo currently sits on the boards of Regional Arts WA and the WA Youth Theatre Company (WAYTCo).

Molly Schmidt

Molly is an author from Albany, WA. Her debut novel, Salt River Road, won the 2022 City of Fremantle Hungerford Award and was partly informed by an Honours thesis that explored how non-Indigenous authors can produce culturally inclusive fiction. Through a PhD candidacy at Curtin University and with the support of the Forrest Research Foundation, Molly is now writing the life stories of two Noongar Elders. This heartfelt project is driven by the Elders themselves, as Molly works with them in a collaborative manner that ensures they remain the custodians of their stories and knowledge.

Molly's collaborators for her submission to this journal include Lester Coyne and Averil Dean. Lester is a highly regarded Menang and Goreng Noongar Elder. He was the national chairperson for the Federation of Aboriginal Torres Strait Island Languages for 15 years and spent another 15 years as the Regional Aboriginal Health Consultant for West Australian Health Services and Aboriginal Health Coordinator for the WA Health Department. Averil is a deeply respected Menang and Goreng Noongar Elder. After spending her early years at the mission in Gnowangerup, she moved to Broome as a nurse's aide. In the north, she met her husband, Kenneth Dean, and became a mother. Eventually bringing her family back to Noongar country, Averil went on to have seven children and opened her doors to many more children in need of a home.

Jay Freeman

Jay is a Perth-based copywriter, editor and academic. After working in brand and content agencies across Perth and Sydney, she now runs her own 'wordshop', Adverbs Etc., where she helps clients from all sectors find the right words and the best way to say them. She developed Curtin University's copywriting unit and continues to teach at both Curtin and Murdoch universities, lecturing in copywriting, advertising and design. Her primary interest lies in how sentence structure, rhythm and punctuation influence meaning and shape voice. A diehard descriptivist, Jay believes that language thrives under a loose rein.

Lindsay Vickery

Lindsay is a composer and performer whose work spans acoustic, electronic,interactive, improvised, and fully notated contexts—from solo pieces to opera. He is a founding member of new music ensembles GreyWing, Decibel, and Magnetic Pig, and his compositions have been commissioned for concert, dance, and theatre across diverse international contexts. His recent work focuses on the relationship between score presentation and musical structure, exploring intersections between electronic/acoustic sound worlds, composed/interactive systems, and interpretative/improvisational performance practices. Vickery is a frequent collaborator with artists across disciplines and has performed at festivals including the Shanghai, Sydney, Adelaide, and Perth International Arts Festivals; SWR Tage für Neue Musik; ICMC; ISEA; MATA; NWEAMO; and NowNow. He has held visiting artist roles at STEIM (Netherlands), HarvestWorks (US), Audio Art Festival (Poland), and Kyoto Seika University, among others. He is Coordinator of Composition and Music Technology at the Western Australian Academy of Performing Arts (WAAPA), Edith Cowan University.

Vanessa Tomlinson

Vanessa is a percussionist/composer, whose practice spans exploratory sound art, ecological listening, and experimental performance. Her work embraces bold site-specific projects—including creating music on rockfaces, in bushland, on flooded rivers, and with reimagined instruments. At the heart of her vision is deep listening: opening our ears to human and more-than-human worlds, and inviting audiences to imagine futures in a climate- transforming environment. Tomlinson has premiered hundreds of works worldwide, collaborating with leading artists, ensembles, and festivals. Recent projects include collaborations with Annea Lockwood, The Journey Down with Tura, Peak Plastique (World Science Festival/ Unsounds), and Out of Time (Clocked Out). She has led major festivals and initiatives including Tyalgum Festival, Easter at The Piano Mill, the Australian Percussion Gathering, and Sounding the Smithsonian, earning multiple APRA/AMC Awards, Green Room Awards, and residencies. A prolific performer, researcher, and advocate, Tomlinson is currently Professor of Music at Queensland Conservatorium, Griffith University.

Erik Griswold

Erik is a composer and pianist working in contemporary classical, improvised, and experimental forms. Originally from San Diego, and now residing in Brisbane, he composes for adventurous musicians, performs as a soloist and in Clocked Out, and collaborates with musicians, artists, dancers, and poets. Griswold is a recipient of an Australia Council Fellowship in Music, an Aria Nomination, a Civitella Ranieri Fellowship, and numerous individual grants. His work "Dragon Ladies Don't Weep," for pianist Margaret Leng Tan, was named the APRA AMCOS "Dramatic Work of the Year" (2021). His collaborative project, The Piano Mill, with architect Bruce Wolfe, received both an APRA-AMCOS Award for Excellence in Experimental Music, and a World Architecture Award for "Culture – Completed Buildings." His music has been performed in Carnegie Hall, Sydney Opera House, Cafe Oto, Roulette, Super Deluxe, Chengdu Arts Centre, Melbourne Festival, OzAsia Festival, and Brisbane Festival, among many others. He has collaborated with musicians Steven Schick, Margaret Leng Tan, Lisa Moore, the Australian Art Orchestra, Decibel Ensemble, Zephyr String Quartet, Either-Or Ensemble, Ensemble Offspring, and many others.

Rumen Rachev

Rumen is a performance-scholar and critical artist who holds an RMA in Media and Performance Studies from Utrecht University, the Netherlands, and is actively engaged in speculative weather futures. As well, he is co-founder of the NEWS Programme (Negative Emissions and Waste Studies Programme) and is Creative Guest, Wairua Awhina (Helping Spirit), and Director of Hope-ology at Activities and Research in Environments for Creativity Charitable Trust. Currently he is a PhD candidate with WAAPA and a HDR member of the Centre for People, Place, and Planet (CPPP), at Edith Cowan University, Australia. His practice-led transdisciplinary project is titled Not All Clouds Are Created Equal.

Jo Pollitt

Jo is a transdisciplinary artist scholar and Vice Chancellor's Research Fellow at Edith Cowan University (ECU) with the Centre for People, Place, & Planet and the Western Australian Academy of Performing Arts. Her research is grounded in a twenty-year practice of working with improvisation as methodology across multiple performed, choreographic, curatorial and publishing platforms. She was an inaugural Forrest Creative and Performance Fellow (2022-2023), is convenor of Dance Research Australasia, co-lead of #FEAS: Feminist Educators Against Sexism, co-founder of The Ediths, and author of The dancer in your hands < >. Her current research is 'Staging Weather' which brings together artist-led, meteorological, and First Nations weather knowledges, to develop nuanced human relations with place-based weather amidst the instability of climate change.

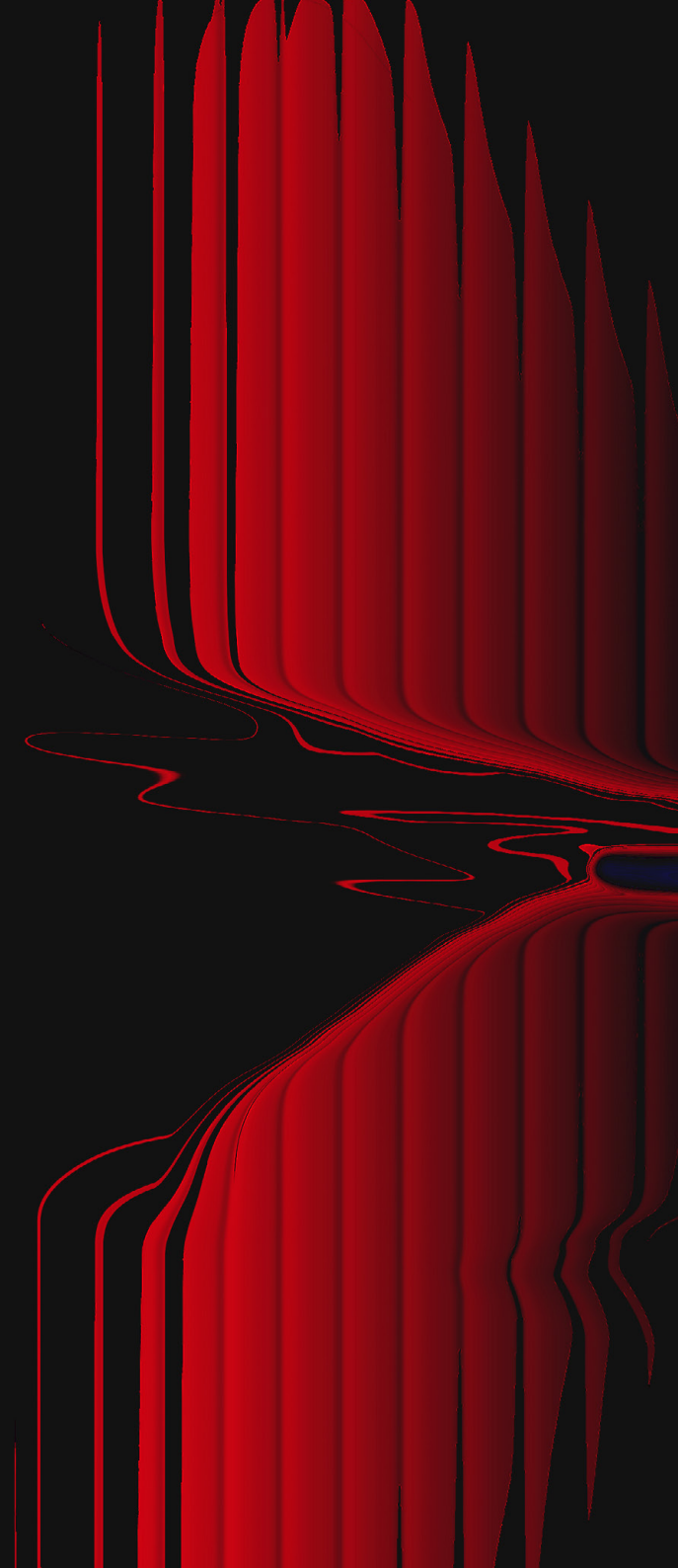
Diana García

Diana is a Colombian architectural designer and researcher currently based in Brisbane, Australia. She holds a Master's degree in Architecture from the National University of Colombia, where her academic work focused on the intersection between analogue drawing and bamboo architecture through the study of Simón Vélez's design processes. Diana has worked across Colombia and Australia in residential, urban, and landscape projects, and currently serves as a BIM Coordinator at RP Design. Her professional practice is grounded in a strong commitment to sustainable design strategies, material experimentation, and digital workflows. Diana's research explores hybrid modes of representation that bridge hand drawing, parametric design, and artificial intelligence. She is particularly interested in how the architect's voice and authorship are transformed in algorithmic environments, and how drawing can persist as a generative and critical tool within contemporary workflows. Her current work investigates the political and epistemological implications of design technologies in the AEC industry, while also developing speculative approaches to drawing as an expanded field. She is exploring the creation of TrázAI, a platform designed to connect architectural thinking with emerging technologies through interdisciplinary collaboration, visual storytelling, and public engagement.

Isaac McCormack

Isaac is an award-winning architect who splits his time between GHD Design and Curtin University as casual academic. His professional work at GHD Design is focused on the public realm, shaping traditional civic spaces across Australia and internationally. In his role as a Casual Academic at Curtin University, he teaches architectural design and methods, creating a space for emerging architects to explore speculative design futures and tackle contemporary problems. A core fascination driving Isaac's work is the evolution of public discourse. He critically observes how the 'town square' has migrated to online platforms, leading to a fractured public voice. This shift prompts him to question the architect's role, exploring how the responsibility for crafting the spaces of public debate has moved from architecture to the tech industry. He believes these digital realms are the new public squares, and their design dictates future social interaction. Isaac's perspective is enriched by a diverse professional history, including work with GHD DIGITAL, HASSELL (Shanghai), UPDIS (Shenzhen), Curtin HIVE (Perth), and COX Architecture (Perth and Sydney). In his free time, he works as a digital artist, using his craft to speculate on how our urban spaces could change and evolve into the future.

Vernacular **Voice** and Cartographies of **Home**



01

Glór / Voice

The Making of a Manifesto

Jennifer Halton

Founder and Creative Director of The Metamorphosis Project,

Director of Internationalisation at the Western Australian Academy of Performing Arts (WAAPA), Edith Cowan University

Like many of the words in the Irish *máthairtheanga* (mother tongue), the Old Irish word for voice, *glór,* has an adaptive and fluid use. One could listen interchangeably to the human voice (*glór an duine*); to utterances such as old wives' tales (*glórtha seanbhan*); or to the voice of nature echoing in the sound of the river (*glór na habhann*) or the whistle of the wind (*glór na gaoithe)* (Ó Dónaill, 1977). In ancient Irish culture, as in many indigenous cultures around the world, voice emerges from a long tradition of animism and cannot be described as a singular thing. While voice can be an identifier of a person, it also signifies the world of that person. We are shaped by the *vox mundi* of the past and present. We develop values from the voices of our tribes. We inherit traits from the voices of our ancestors. Voice is an inherently plural phenomenon.

Vox: Cartographies of Voice and Power, the second issue of The Metamorphosis Project Journal, grew from a desire to map multiple perspectives and experiences of voice as a creative and performative phenomenon and as a power construct. This issue adopts the notion of cartography as a symbolic practice. It presents a contemporary atlas of voice that is not static, but rather a living object—a map in motion—drawing on stories that relate to place and culture, linking the past, present and future within its narrative terrain.

This issue presents an opportunity to embolden our own voice at The Metamorphosis Project and to share our vision for the future through our manifesto: *Glór*. Built on the foundations of five unwavering principles, *Glór* inscribes our mission to connect people and ideas that spark curiosity and imagination at the intersection of art and research, delicately bypassing the siloed systems that marginalise transdisciplinary and experimental research and practice. We believe that social and cultural innovation can only be achieved when the silos between disciplines and institutional systems dissolve, creating space to pioneer new, experimental forms of knowledge creation. Alexander Pope wrote that "to err is human" (Pope, 1711, p.30). We posit that to err is creativity in action. The seeds of innovation are sown into our mistakes. We need platforms for experimental play where errors can become ideas for transformational change. Sowing the seeds of quiet revolution, our manifesto is a pathway for change, daring to ask how we can do things better (together) as creative and intellectual communities.

The Metamorphosis Project is a slow, **intentional movement to reimagine the Renaissance form of humanistic practice and transdisciplinary creativity. It is a movement that delves deep into the creases and folds between disciplines where echoes of the liminal voice** are heard, celebrated and platformed. The story of The Metamorphosis Project is inextricably intertwined with my personal story, my *glór*, and it feels apt to share my voice in this essay. Part I, 'Lessons from the Renaissance', journeys back through time, narrating how the ideas for The Metamorphosis Project and *Glór* were born. It is a story that starts with a childhood obsession for collecting old books, meanders through the 15th and 16th centuries, and ends in Part II with the presentation of a manifesto for 2025 and beyond.

Part I
Lessons from the Renaissance

The Presence of the Past

At a young age, I told my mother I wanted to be a historian so that I could always be surrounded by books. Not just any book; the old, dusty variety scented with an unmistakable bouquet of mildew and mould, thumbed by a thousand hands, and preserved in finely crafted bindings, dust jackets and gold leaf. These books represented more than words, more than stories. When I held them, read them, they silently hummed to the rhythm of the voices of the past. I felt their energy transfer off the pages and into my consciousness.

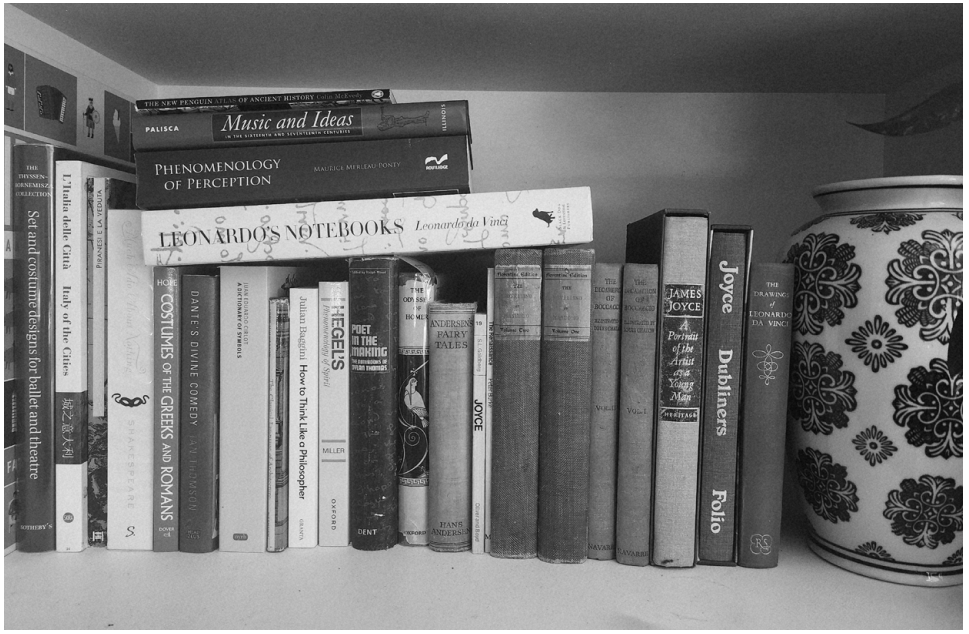
As I grew up, collecting old books and listening to their voices became a sacred ritual. I established regular meanders through charity shops along the long mile from Aungier Street to Capel Street in Dublin city, searching for literary treasures. My quest didn't distinguish between genre or vintage. If the book's aura entwined with my own, it came home to nestle on my shelf. I spent long periods of my doctoral research immersed in historical archives in Florence, delicately turning the pages of five-hundred-year-old manuscripts, diaries and letters penned by Medici hands. I donned the archivists' white cotton gloves, careful not to leave my mark as I leafed through Renaissance drawings and prints in the Uffizi Gallery, tracing echoes of the artist's voice in their charcoal and ink. As I held these artefacts, time seemed to disappear. I felt exhilarated by my proximity to history and transformed by the presence of the past.

The Power and Plurality of Voice

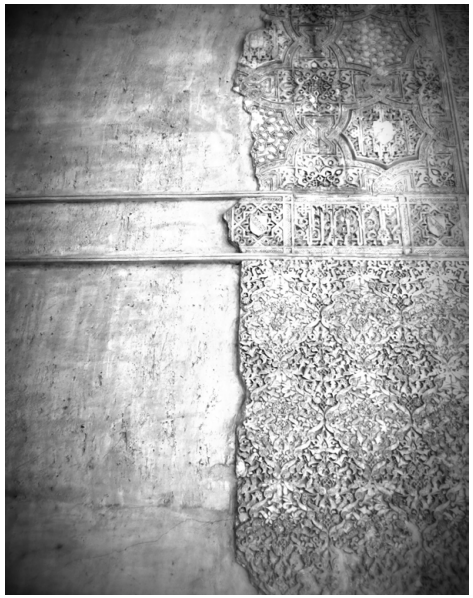
My bookshelves are an ode to voices of the past and present. They are an integral part of my identity, my values, and my vision. They tell stories of the human condition—that elusive force that swells within us, shaping who we are as a species, and our relationship to the world around us. The seeds of The Metamorphosis Project were planted and nurtured over time, inspired by the voices I encountered on my collector's journey and during my archival meditations. The voices of Renaissance scholars, poets, artists, and historical figures spoke the loudest. They had something important to say, and I listened intently.

This period of history—spanning two centuries from the mid-1400s to mid-1600s—has been examined by historians from a strongly Eurocentric perspective. However, the Renaissance is termed a 'rebirth' (rooted in Latin: *nasci*) for a reason. The enormous body of scholarship, art and innovation that emerged during this epoch, which we commonly associate with Italian masters of art and literature, was inspired by the circulation and convergence of ancient and medieval knowledge from across the world, spanning Hellenic, North African, and Middle Eastern origins.

Alongside ancient Greek philosophy, predominantly Neoplatonism and Aristotelianism, scholars from Persia and the wider Islamic world had a significant influence on medieval and Renaissance philosophy, medicine, mathematics, and astronomy. Amongst them were Muḥammad ibn Mūsā al-Khwārizmī (c.780-850), whose large corpus of work includes the invention of algebra (and from which we have derived the familiar term 'algorithm'); Avicenna (Ibn Sina; c.980-1037), the 'Prince of Physicians', whose work charted a path for medical science in Europe; and Averroes (Ibn Rushd; 1126-1198), who laid the foundations for early modern rationalism through his commentaries of Plato and Aristotle (Aligabi, 2020; Renima et al., 2016). Viewed in this context, the Renaissance was made possible by a collaboration, over time and place, of cross-cultural, multilingual, and transdisciplinary scholarship. It was both shaped by—and a celebration of—the plurality and power of voice.



Figures 1-3, Samuel Beckett Bridge, Dublin, Ireland (2016); the Odeon Theatre, Piazza degli Strozzi, Florence, Italy (2014); and a selection of the author's books (2025). Figs 1-2 from the author's blog, *An Urban Pictorial*. Digital photography. © 2014 Jennifer B. Halton. Courtesy of the author.



Figures 4-7, Jennifer Halton, 'Texture and shadow play', 2014, ***An Urban Pictorial.*** Moorish and Renaissance architectonics converge in the architecture of the Alhambra of Granada. Digital photography, © 2014 Jennifer B. Halton. Courtesy of the author.

The Renaissance presents a case study for embracing plurality. One should not attempt to ontologise this interlude of history in linear time or through teleological language, for it cannot be understood in isolation from its past, nor the future beyond it. It moved to the rhythm of spherical time in which past, present, and future intertwine, cultivating an unparalleled canvas for imagination and innovation. A close analysis of the culture, art and discourse of this period reveals how divergence, difference, and dialogue were essential elements for the fusion of thought and practice that crystallised its outputs. Intellectual inquiry was perceived as a shared and cross-fertile endeavour. In the Middle Ages, Ibn Rushd (Averroes) articulated the importance of building on the knowledge of the past, 'for if before us someone has inquired into [wisdom], it behoves us to seek help from what he has said. It is irrelevant whether he belongs to our community or to another' (Aligabi, 2020). Similarly, the Renaissance thinker understood that the migration of ideas—across time and space—is the foundation upon which all knowledge is built.

The concept of voice as a plural phenomenon was a formative part of Renaissance discourse, as expressed through humanistic philosophy and the marriage of Neoplatonic and Aristotelian ideas. Neoplatonic epistemology, the notion that all humans have access to an infinite store of prior knowledge (anamnesis) via universally divine ideas (logos), was commonly practised. Aristotelian rhetoric and ethics became instructional models for moral education and the practical application of knowledge. Herein, the Renaissance teaches us the importance of voice as a collective rather than an individual pursuit. Once we step outside the idols of the cave (Bacon, 1620/1878), we realise that our intellect and our ego are as much a mirror of otherness as they are a mirror of the self. As the poet and outgoing President of Ireland, Michael D. Higgins, has orated, 'we are all migrants in time' (Higgins, 2012). Our thoughts and our voices are also migratory. In them, we can hear echoes of the past and whispers of the future, simultaneously embodying multiple diverse perspectives and viewpoints. These narrative pluralities are powerfully present in the philosophical and artistic oeuvre of the Renaissance and audible in its collective voice.

Towards transdisciplinary epistemologies

The Renaissance cultivated a cultural milieu built on the foundations of transdisciplinary knowledge creation. At this time, education was defined much less by discipline than by the interchange and synthesis of multiple forms of knowledge and skills. Knowledge traversed a horizontal trajectory, opposing the disciplinary verticals of the modern academy. The modern notion of 'discipline' would have been a foreign concept to humanists like Marsilio Ficino, or polymaths like Andrea Palladio and Leonardo da Vinci. Knowledge was not treated as an end product, but rather as a raw material recycled into new forms. Renaissance education sought to master the liberal arts, a curriculum of seven subjects classified into two groups: the trivium (language-based subjects) included grammar, logic and rhetoric; and the quadrivium (mathematical subjects) included arithmetic, geometry, astronomy and music. The mechanical arts (practical crafts and technologies) were the media through which the liberal arts could be applied in practice. This emphasised a layered and symbiotic approach to knowledge creation and learning. One could innovate a new sculptural technique while also designing an engineering apparatus, inspired by a close study of the laws of physics. Today, the opportunity to create impact across multiple fields is rare due to limitations in institutional structures and narrowly defined research and funding objectives. In the past, it was both systematically possible and culturally encouraged.

Figures 8-10, Jennifer Halton, 'The flâneur returns', 2016, *An Urban Pictorial*. Palladian architecture, embodying the principles of sacred geometry (Phi Φ), finds expression in the 18th-century Georgian manor, Castletown House and Estate, in Co. Kildare, Ireland. Andrea Palladio's work breathes life into Goethe's belief that architecture is frozen music and reflects a powerful transdisciplinary ethos. Digital photography, © 2016 Jennifer B. Halton. Courtesy of the author.

Another example of contemporary disciplinary "drift" can be seen in the pedagogical and epistemological separation of the arts and technology. The early moderns adopted the ancient Greek philosophy of "techne", a term that broadly referred to the practical study of art, skill, technique, or craft. The etymology of the term 'technology' is rooted in the study of (logos) art or craft (techne). Techne embraces art and technology as two branches of the same tree. Where once they existed in harmony, they now stand in polarity. Today, a substantial amount of government funding is invested in emerging technologies and deep-tech research in the STEM and innovation sectors.[1] At the same time, we are witnessing a critical decline in support for the arts and humanities, which are erroneously considered as separate from (and irrelevant to) modern technology and innovation. Mass departmental closures and strategic restructures in the humanities, performing arts, and social sciences are happening at universities around the world, at a time when we urgently require the valuable skills these disciplines impart: critical thinking (logic), respectful debate (rhetoric), emotional intelligence and empathy, effective communication, cultural understanding, adaptability, and cooperative cohesion. These skills form the foundations of our collective evolution and are an important means of understanding the human condition.

One must defend the importance of studying the arts for the sole principle of *l'art pour l'art*, art for art's sake, and also argue that the arts and humanities are essential to addressing some of the biggest crises on our path in the 21st century: the ethics of AI, climate change and climate migration, ecological decline, food scarcity, housing, and political reform. The skills they teach us will help design practical innovation, robust social policies, and sustainable and ethical business strategies. The separation of art from technology is etymologically and culturally incongruous and is an epistemological barrier to innovation. The Metamorphosis Project champions the voices of those working to dismantle the epistemological divide. We argue for a return to the Renaissance art of integrated thinking, experimental craft, intersectional scholarship and unbridled imagination: a movement towards transdisciplinary epistemologies, awakening the latent creativity of the spaces between.

A return to slowness

The Renaissance also presents a case for a deliberate and ceremonial return to slowness as a radical counterpoint to the global race for productivity growth. Before countries were thought of as economies, and before economies were measured by national and domestic productivity, humans constructed a very different relationship with time. The early modern salon, known in the Italian vernacular as *l'accademie* (academies), provided a stage for slow and intentional dialogue where the art of rhetoric was practised, and new ideas were forged from the kindling of conversation. Crucially, these conversations and environments honoured the slow deliberation of thought, unmarred by the constructs of time or objectives. They often had no fixed destination, allowing creativity to meander and flow within the freedom of the undefined.

Italian academies emerged from the humanist culture of fifteenth and sixteenth-century Italy, beginning as informal discussion groups focused on literary or philosophical interests (such as the Platonic Academy that formed around Marsilio Ficino in Florence). Growing in popularity and number at the turn of the sixteenth century, they later coalesced into formalised intellectual societies, where artists, writers, philosophers, scientists, religious and political orators met frequently to engage in dialogue and debate, interpolated with theatrical and musical performance. Academicians formed important social and cultural networks in and outside of Italy and greatly influenced social discourse, literary and artistic practice, print culture and politics in the early modern period. Despite the Medici asserting some ducal controls over the Florentine academies in the sixteenth century, they remained a safe space for rebellious and proletarian individuals who challenged the status quo and championed avant-garde ideals (Everson, J. E., et al., 2016).

Figure 11, Jennifer Halton, 'The last mile home', 2014, *An Urban Pictorial*. Florence streetscapes. Streetwalking in Florence, Italy, is a slow, sacred meditation wherein the city becomes a spectacle and the streetwalker its spectator. The city is symbolic of time itself - a record of humanity - as hundreds of years of history echo from the layers of stonework in its buildings and streets. Digital photography, © 2014 Jennifer B. Halton. Courtesy of the author.

[1] In the 2025-26 budget, the Australian federal government pledged a total of AUD$15.1 billion in investments related to science, research, and innovation. By contrast, the same budget allocated AUD$318 million to support the National Cultural Policy, Revive, shepherded by Creative Australia. An analysis of the Science, Research and Innovation (SRI) Budget Tables shows that outside of Australian Research Council funding, the arts and humanities are virtually absent in the list of registered recipients (by category) of SRI funding between 1978-2026 (Department of Industry, Science and Resources (DISR), 2025).

The Renaissance salon is an exemplar of slowness-as-action; a method that values process over outcome and space over time. Just as the salon nurtured ideas that over time grew into philosophical and political movements, the Renaissance artist also instilled the power of slowness into their craft. They yielded their tools to inscribe the ideals of beauty into marble, bronze, linen, and glass, to evoke catharsis and elevate the human soul; a goal that was respected as a slow, ceremonial, and sacred process by their patrons. Michelangelo Buonarroti's David took three years to sculpt; Filippo Brunelleschi's dome for the Florentine Cathedral of Santa Maria del Fiore—a feat of early modern engineering—took sixteen years to build; and the stained-glass program designed for Santa Maria del Fiore took fifteen years to complete by a team of artists including Lorenzo Ghiberti, Paolo Uccello and Donatello (Costanzo & Leach, 2022, pp. 69-80). Each of these works, still standing today, are enduring symbols of Renaissance innovation and are testament to the virtues and values of slow production, the intimacy of care, and the diligence of craft. This method has moulded itself into the very fabric of *Italianità*, manifesting today as a phrase that one often hears reverberating from the Italian streetscape: "*piano, piano*". Slowly, slowly. The Renaissance masters of craft understood and lived by the ancient aphorism: *ars longa, vita brevis*. Art is long, life is short.

Figure 12. *An Urban Pictorial.* Street art in Oltrarno, Florence, Italy. Digital photograph, © 2014 Jennifer B. Halton. Courtesy of the author.

The liminal voice: Moving between worlds

My research and creative interests do not fit neatly into one, categorizable box. As a literary flâneur, I find joy in moving between worlds and thresholds and remain curious about what those worlds can learn from one another. During my doctoral research, I explored related areas of knowledge to investigate the relationality of disparate phenomena and the interplay between theoretical frameworks. By going beyond the imagined borders of my home discipline (musicology), I was empowered to see how early modern music intersected with the cultural practices and socio-political milieu surrounding it; how moments in history connect to both the past and future in spherical time. Studying phenomenology, film, and cultural theory led me to develop a new framework for reading the Renaissance festival—a prolific medium of musico-visual and theatrical innovation—as proto-cinema. With a distinct proto-cinematic imagination, I argued that the Renaissance festival was part of a history of cinematographic consciousness that, over time, propagated the thoughts and practices that made the pictures move some four centuries later (Halton, 2018).

As the idea for The Metamorphosis Project began to germinate in my mind toward the end of my PhD, I knew I wanted to create a platform for peripatetic scholarship. This kind of scholarship—with its permissibly blurred boundaries, experimental methodologies, and margins for creative error—embodies the liminal voice; the voice that voyages into threshold spaces, forming connections between things and weaving them into new narratives. Creating a platform for the liminal voice remains an integral part of our mission today.

As I reflect on my fascination with the past, my love of old books, and the invisible, indefatigable pull the Renaissance exerts over me, I am beginning to understand a pattern. In her novel, *There are Rivers in the Sky*, Elif Shafak writes that 'we are drawn to the kind of stories that are already present within us' (Shafak, 2024, p. 210). These words sank deep into my bones as I read them. Shafak effortlessly captures how we, as scholars, writers, and artists, find pieces of ourselves in the stories we encounter and the ones we create.

Using our manifesto as our map and our guide, The Metamorphosis Project will continue to weave cartographies of the stories already present within us and co-create the as-yet-untold stories of our futures. These stories will find expression in the pages of our journal, in the conversations of our salons, and in the many creative endeavours we will embark upon. We will move slowly and deliberately forward in our mission to listen deeply to the past and to champion the plurality of our voices in the present.

Figures 13-15, Jennifer Halton, 'Carnevale', 2014, *An Urban Pictorial*. Carnevale transforms the piazzas and porticos of Venice into a performative ode to Renaissance art, culture, costume and memory. Digital photography, © 2014 Jennifer B. Halton. Courtesy of the author.

Part II Manifesto

GLÓR

01 CHAMPION TRANSDISCIPLINARY CREATIVITY

The Metamorphosis Project recognises the potential for transformation at the threshold between art and research, acknowledging the symbiotic relationship between these worlds and harnessing it to reimagine the Renaissance form of transdisciplinary creativity.

02 CREATE WITHIN THE FREEDOM OF THE UNDEFINED

We explore art and research as interchangeable and metamorphic phenomena: *shifting forms, telling stories, and shaping futures.*

We create space for practitioners who work between and beyond disciplines,
play with creative uncertainty, and
chart unconventional routes toward novel terrain.

03 CELEBRATE PLURALITY THROUGH DIFFERENCE, DIVERGENCE & DIALOGUE

We work within circular time; we see the future unfold in the past, and the past in the present. We bypass linear teleology in favour of narrative plurality, where multiple, diverse perspectives coexist simultaneously.

04 EXPLORE THE RADICAL POWER OF LIMINAL SPACES, VOICES, AND IDEAS

We provide a platform for the liminal voice and seek to transform liminality into a blueprint for radical reflection, experimentation, divergence and reemergence.

We promise to move with unapologetic presence as we alchemise the conditions for reimagining potent societal change.

05 RETURN TO SLOWNESS AND INTENTIONALITY AS A FORM OF QUIET REVOLUTION

We believe in slowness-as-action; a method that values process over outcome and space over time. We do this through creating thoughtful spaces for intentional dialogue, reviving the art of rhetoric, and forging new ideas from the kindling of conversation. We move within this rhythm, forming gentle soundwaves to quietly set in motion the kinetic energy of change.

Is é seo ár glor agus ár bhfís.

This is our voice and our vision.

Bígí linn.

Join us on our journey.

02

Who gets a Seat at the Table?

Lauren Fane
Architectural Practitioner

Mariela Espino Zuppa
Writer, Facilitator and Storyteller

Prelude

This piece explores the strengths of designing through collaboration. It utilises conversation to trace spatial memory and explore how we, as a collective, can reclaim agency as we envision our future(s) for *home*.

The voice behind this work is deeply personal, rooted in place and memory, travelling to-and-from Noongar Country, in the south-west of Western Australia, and the Valley of Mexico.

The authors' process celebrates principles of phenomenology, paying close attention to how spaces are felt and experienced. It is an invitation to remember "What is home made of?", while asking a pertinent question, "What if our memories of home were used as a map of teachings, and possibilities, for how we think about, and design home(s)?"

The work is categorised into three sections:

1. remembering: a conversation

2. gathering: a cartography of feelings and symbols

3. in pursuit of our future home(s)

There is a multitude of spaces and stories happening in our city all at once,
An opening in the sky,
A passage of light refracting on the Derbarl Yerrigan.

A collection of effortless spaces that summon rest, communion, and prayer.

The water's surface appears motionless this morning. Such stillness giving rise to a mirage... sharp, geometric forms begin to appear – white, tall brick walls plotted upon delicate limestone cliffs, fracturing the river's horizon.

It is the world we have created, on top of the one that existed already.

A sight full of paradoxes,

Home.

–

Snippets of a brilliant shade of white have begun to dot the tree canopy along the river. A quiet invitation towards rest. The kettle whistles, as we begin to trace our atlas of home...

1. remembering: a conversation

What is your earliest memory of a feeling of home?

Subject 1: I am nine months old, nestled beside my dog on the sunlit porch of our Kalgoorlie home.

Subject 2: It is a feeling my body recognises before my mind can put it into words. It lives in the realm of what can be felt but not necessarily seen. When I close my eyes I am looking out of a window framed by mountains. Tepotzotlán 'the place between hunchbacks', my first home.

Imagine home as a symbol,a colour, a gesture – what emerges?

Subject 1: Exploration. Layers from within extend outside, an enfilade stretches from the dark bricks towards the paddocks, bush and creek beyond. There are a multitude of ways to move through the same place. Hiding places. Rooms for different feelings. Warmth and play. Trees to climb, giving us the chance to see far and wide. A space that fits others, human and non-human.

Subject 2: Circles, the moon, sun, warmth, food and altars. The feeling of being in relationship with everything around you. A web of homes: uncle around the corner, aunty two doors down, my grandmother, Cielo, just down the hill.

Bright colours. Stories, and the walls that hold them. Mountains. The smell of atole. The sound of my mother's voice.

Is there a space from your childhood that continues to live in your body?

Subject 1: Rummaging below the canopy, the warmth of a bare-back horse, patiently offering foundation, as I wobble towards the oranges just out of reach.

The gymnastics arena, masquerading as a lounge room for all.
'The dungeon,' cold and uninviting, entombing all light.

Subject 2: The generous shade of our beloved pomegranate tree. She lives in the backyard, where so many people we love have gathered around her to eat, dance and be together.

The nicho upstairs, a permanent altar paying tribute to the spirit and memory of those we love.

The laundry room, where ironing, sewing and breakfast before school took place. Every morning of my childhood, mum, my brother and I were held together in that space. The sweetest feeling of home, found in the laundry room...who would've thought.

How do you carry the feeling of home into new spaces?

Subject 1: The body keeps the score, I follow her. She's drawn to simple delights, often found in the komorebi dance of light or a soft place suited for a roll around. Greenery that begs to not be forgotten piles into the car awaiting their next destination, along with a memory box full of letters from my loves, a black cockatoo feather and keepsakes from distant shores.

Nesting in a new place unfolds with the seasons, with sensory delight as the conductor.

Subject 2: Through a collection of objects that hold the stories of other places where I have felt at home. Photographs of the people I love most in the world. Through candles, and spaces that summon ritual and rest. A kitchen full of familiar smells from food waiting to be shared.

Through the investment of love and care into a place. Remembering spaces are alive, witnessing, and willing to care for us in return. It's slow work, reciprocal work, cultivating a sense of home.

Here in Boorloo / Perth, where do you find echoes of home?

Subject 1: Amongst the Marri, Banksia, Ghost gums and Sheoaks. Extended invitations for another cuppa. Upside down, upon hands or from above.

Subject 2: Sitting under the shade of a Sheoak. Walking. Next to where the nasturtiums grow, where the winter sun falls around mid-morning. Swimming. In candle-lit rooms.

Listening to the song of magpies and honey eaters in the early hours of the morning.

What do you feel marks the difference between housing and home?

Subject 1: Can you imagine yourself sharing a cup of tea there? Did the birds receive their invite?

Subject 2: A home has the capacity to host, to hold many. It is an infrastructure of relationships. A house has no shade to rest under. It is enveloped in a sense of urgency and crisis, devoid of soul.

Home is made. House is bought.

Traces that bring the memory of home to life.

Figure 1. Lauren Fane & Mariela Espino Zuppa, Cartographic memories, 2025. Mixed-media collage.

2. gathering: a cartography of feelings and symbols

1. Gathering circles
2. A permanent altar
3. Candles, the way they summon ritual and rest
4. Bodies of water that hold us
5. Moments of stillness
6. Mountains
7. Many ways of moving through the same place
8. Our bodies
9. Unexpected places that make us feel at home
10. Tree canopies
11. Bird song
12. Photographs of places and people we love
13. Gazing, beyond.

3. layering embodiments of home in the pursuit of designing one

How can personal and collective narratives become part of the blueprint for how we contemplate and design home(s)?

The inquiry situates itself within phenomenology, exploring personal spatial histories through conversation, memory recall and drawing. What is home made of? What if our memories of home were used as a map of teachings, and possibilities, for how we think about, and design home(s)?" Storytelling offers the authors a design methodology founded on lived experience and the emotions and memories associated with home.

A phenomenological approach in architecture prioritises the sensory experience of humans within the built environment. The words of Finnish architect Juhani Pallasmaa (Pallasmaa, 2012, p. 67), "the 'elements' of architecture are not visual units; they are encounters, confrontations that interact with memory" resonate with the authors' interest in exploring the way architectural and environmental elements impact our memories of home, and sense of place.

It isn't personal narratives alone that can enrich the process of how we design home(s), but more so, our collective stories. Every story, every memory, and every symbol of home become layers of depth in the blueprint of our future home(s). Acknowledging that our sense of place and belonging is deeply shaped by the passage of time, with certain colours, shapes, light, and details that hold our networks of relationship.

The result might be a rich and multilayered map of what home looks, feels, and sounds like for a multitude of us. To help us understand how it can be evoked, so we can move towards a future that designs spaces where everyone at the table has the right to feel at home.

Simon Pendal (2016) articulates the concept of 'entrainment' as a dynamic interplay between three interrelated resonances: resonances in the 'direct present', 'deep time', and 'lingering impressions', that together inform a design methodology grounded in feeling and thinking. The direct present refers to the visceral, deeply felt experience of places. Deep time involves the creation of spaces that resonate "in memory through affiliation" (Pendal, 2016, p. 6), situating 'place' within a broader historical and emotional continuum. Lingering impressions describe the reflective influence of past works acting upon designers themselves, a generative force that continues to shape future works. Pendal notes that when two or more of these resonances coalesce, they form the phenomenon of entrainment; a moment of harmonic convergence, "a binding together of feeling and thinking - as a charged suspension in the moment." (Pendal, 2016, p. 9). These resonances reflect how spaces are felt in the moment, remembered, and can be used to continually inform an evolving body of work. When applied to housing, this approach suggests that personal narratives (memories, rituals and emotional associations tied to home) can become active design considerations that allow "a clearer use of the term 'atmosphere'" (Pendal, 2016, p. 6). By enabling stories to shape spatial decisions, people can create homes that resonate with past lived experiences, fostering environments that feel both familiar and meaningful.

Through these approaches, the inquiry into personal and collective spatial stories becomes essential to the process of planning, buying, building, and creating a home, using memory and storytelling as generative forces within the design process.

What happens when the methodology for designing a home begins with the inclusion of what lives at the heart of our personal and collective memory?

The designing of home might begin with 'other' spaces, places for altars, rest, or communion with nature. Large, generic rooms might shift towards alcoves, nooks and edges. Rooms might begin by considering how they accommodate the old people we love, visiting friends, or the unpredictable surges of creativity that ask for space to hold mess gracefully.

Footprints might become smaller, not in a way of compromise, but as a gesture of reciprocity that acknowledges other homes around us, both natural and built.

Design could help us locate moments within home to catch glimpses of treetops or landforms that anchor us in place and time. Remembering home as a living archive, and the designing of home as an opportunity to pass on stories and traditions, while considering what built legacy we want to leave behind.

How do we reconcile the urgency of housing supply with the slow work of cultivating a home?

Western Australia finds itself at a crossroads. In 2024, over 20,000 homes were completed, more than any year since 2017, yet the State still fell 4,000 homes short of its National Housing Accord target. Meanwhile, fewer than half of mortgage holders and just 39% of renters consider their housing affordable (Crowe et al., 2025). These numbers speak to a pressing need: more homes, built faster, and at prices people can bear.

But behind the urgency lies a quieter question, one not captured in statistics or policy targets: *What does it mean to feel at home*?

Home is not simply a unit of supply. It is a space of belonging, shaped by memory, rituals and relationship. Cultivating this feeling takes time. It asks for care, for listening, for design that responds to the lived experiences of its occupants. And yet, the systems driving housing production often leave little room for such nuance.

How do we reconcile these two forces, the need to build quickly alongside the need to build meaningfully?

Perhaps the answer lies in reimagining our process. What if urgency didn't equate sacrifice, but instead, prompted us to reimagine how we design, consult, and build? What happens when we recognise the

role of storytelling in the process of planning? What does home mean to the collective you are building for? What if affordability wasn't just about cost, but about emotional and cultural sustainability, about legacy?

To meet the housing crisis with wisdom, we must expand our definition of success. Shifting the focus from homes delivered, to homes lived in; deeply, comfortably, and with a sense of place. The challenge is not only logistical, but poetic. It asks us to pause and remember that housing will never just be infrastructure. That it is in fact the architecture of our lives, and our legacy.

***Home*, for now**

We find home amongst walls seeded or laid by hands we don't know. Temporary spaces can hold the essence of home, asking to be adorned by the objects that help us remember.

In this context, the designing of home might scale down to a moment; a warm drink, a quiet corner, or a detail that embodies care. These small acts of dwelling challenge the dominant narrative that home must be owned to be meaningful. They ask us to consider whether delight, defined by the everyday and mundane, might be where home is found.

Between the authors, more than 30 homes have been nested in, grappled with, tended to, and left behind. These experiences speak to a broader truth, that belonging is not bound by tenure. It is cultivated through relationship, instants, and details.

In reconciling urgency with cultivation, *home for now* reminds us that housing need not be permanent to be profound. We begin to imagine a city shaped not just by the ideals of permanence, but by the ideals of justice and care, where everyone has a right to feel at home and to feel safe.

Conjuring *Home*: a methodology

Navigating the deeply felt, expressed through cartographic memory recall, offered a moment to pause and reflect on what home means to the authors. Returning to the personal, while resisting the sense of urgency and crisis surrounding our futures.

For Subject 1, this process became an opportunity to reflect on and resist the pressure to 'just buy something.' A narrative where financial pragmatism often overrides personal desire. Instead, they were guided by their own inner longings, towards an idea of home that feels truly personal. The act of imagining what home means to them offered a quiet defiance; an assertion that meaning may not need to be sacrificed in the name of market logic.

In the wake of World War II, Japanese architect Kazuo Shinohara turned his attention to the domestic realm. His Shojutaku (Small House) projects were not just exercises in minimalism, but meditations on how structure, simplicity, the role of nature and movement could shape the experience of home (Kuan, 2018, p. 7-16). Working within the constraints of limited space and resources, Shinohara's designs aligned with the European Existenzminimum movement, an architectural response to housing scarcity that embraced the essential over the excessive.

Today, Perth faces a different but no less urgent challenge. With urban sprawl continuing to threaten and destroy the natural environment and housing affordability slipping further from reach, the city is being called to densify. Infill and medium-density housing are

no longer optional; they are necessary. But as we build faster and more compactly, we must ask: what is home made of? And how can we integrate the voice of the collective into the process of how we plan and build our future home(s)?

Shinohara's work offers a quiet provocation. His attention to domestic movement, particularly the choreography of everyday tasks, reminds us that home is not just a container for life, but a stage for it, a map through which we move daily. His exploration of *Ikebe*, the idealisation of bodily movement in domestic labour, invites us to consider how space supports the rituals and relationships that define home. Though rooted in a different cultural and historical context, his questions remain relevant: How can we design for intimacy within constraint? How can simplicity become a source of innovation and richness, rather than reduction?

In Perth's push for density, there is an opportunity to revisit these ideas to curate the kind of home(s) we want to thrive in, and those we want to leave behind. Simplicity in design, when thoughtful, can be a powerful tool for creating homes that are both efficient and emotionally resonant. It can help us respond to smaller sites and tighter budgets without sacrificing the dignity of a daily life that feels meaningful. But this requires more than functional floor plans. It calls for a deeper engagement with how people live, move, and make meaning in space.

To reconcile urgency with cultivation, we must design not for numbers, but for nuance and memory. We must see each dwelling as a potential living home. One that will be shaped, and reshaped, by movement, care, and webs of relationship. In doing so, we begin to honour the scale of the human experience within a home, and housing. In times of housing urgency, stories offer a way to embed intimacy into efficiency, ensuring that even the smallest homes can speak to the lives within them.
By drawing on the everyday rituals and routines of occupants, designers can shape spaces that feel personal and lived in. As Nigel Coates suggests, narrative architecture "foregrounds the experiential dimension of architecture", (Coates, 2012, p. 9), highlighting how stories can guide not only design but also how people relate to a place.

How might listening to stories of belonging reshape the way we collectively envision our city's growth?

Recalling and curating memories of home through cartographic mapping, the layering of stories and symbolic gestures offers an alternative way to move forward with designing home, rooted in personal truth and collective memory.

Housing design can become more equitable when driven by the voices of the people who will make these houses into homes. This is a collective venture and a call to action for broadened participation in creating home(s), while protecting our first home amongst nature. The invitation is to articulate what truly nurtures a sense of home, to offer insights that policy and market analysis alone cannot reach. It reveals that there is room—in fact, a need—for more voices at the table.

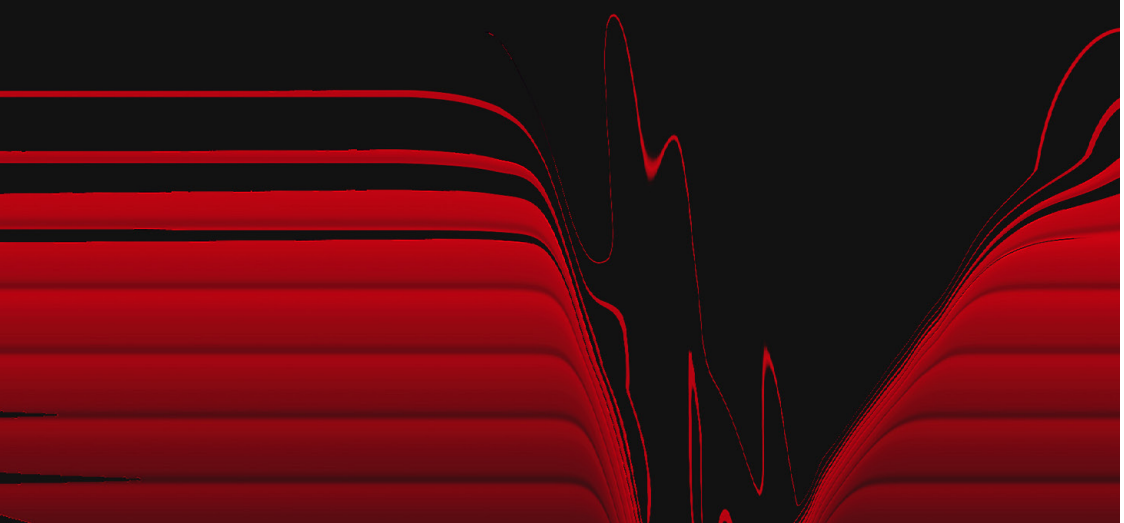
Many stories woven together have the power to shift larger narratives. Housing is no longer a numbers game, but something that holds the potential to be a collective act of remembrance, imagination and design for the lives we want to live, and the legacy we wish to leave for our future generations who will be held and witnessed by these same walls.

03

The **Sound** of **Freedom**: Embodied Voice

Mohammed-Saheed 'Ayo Busari'

Creative Producer, Curator, Musician, Visual Artist, Writer, Performer, and Support Worker



"Freedom" (First Edition)

Freedom,
What does it feel like?
Especially when you are from the **West**,
and I do not mean being **West**ern,
but being **West** African,
from South-**West** Nigeria.
I mean, being a child born in Ibadan City
but who grew up in Lagos City,
two cities - two and a half hours apart,
Oyo State and Lagos State.
What is the point of being progressive without freedom?
Or what is the value in being outstanding without freedom?
One would think that being the country's largest city
by size would make Ibadan stand tall,
or even being the country's largest city by population would give Lagos opportunities.
Does freedom not mean to stand tall with pride, and not people?
And isn't freedom meant to be like a bird so strong?
But not even money, trade, people and land,
can give both cities that power of freedom,
especially freedom from the **West**,
which we both know you crave for.

Freedom,
What does it feel like?
Especially for someone like me
Who now lives and works in the **West**ern world,
a place far away from my motherland.
In Perth, **West**ern Australia,
many doors have been opened for me
where I felt freedom like the wind on my face.
In Fremantle, **West**ern Australia,
many doors I have opened for myself
where freedom looked like a blank canvas.
All these have only been possible
All thanks to Almighty Allah,
the ones who birthed me,
my family, my friends and my community
back home and in the diaspora.

With them, I have realised that freedom is an open window.
But even now, I still question *"what does freedom really feel like?"*,
Why isn't it like a breath of fresh air all the time?
So with all the fresh air that I breathe into my lungs
in this nation, I pay my respect
to elders, past and present
and hope that one day
we all have the freedom to claim back our cultures,
traditions and lands that have been stolen from us by the **West**.
We are extremely tired of feeling like outsiders
in a place called home
and our dream is to be the keepers
of our history and stories.

Freedom,
So what does it feel like then?
And what does it mean to you, them and me?

Introduction

The Sound of Freedom is an artistic research project based on my published poem, "Freedom" (Busari, 2022). Through this ongoing research, I aim to redevelop and expand the poem into a full-length theatrical poetic performance that fuses theatre, history, spoken word, music, and audiovisual design. The poem serves as both my methodological entry point and a creative text. It asks questions about belonging, identity, and the paradoxes of freedom across African and diasporic contexts:

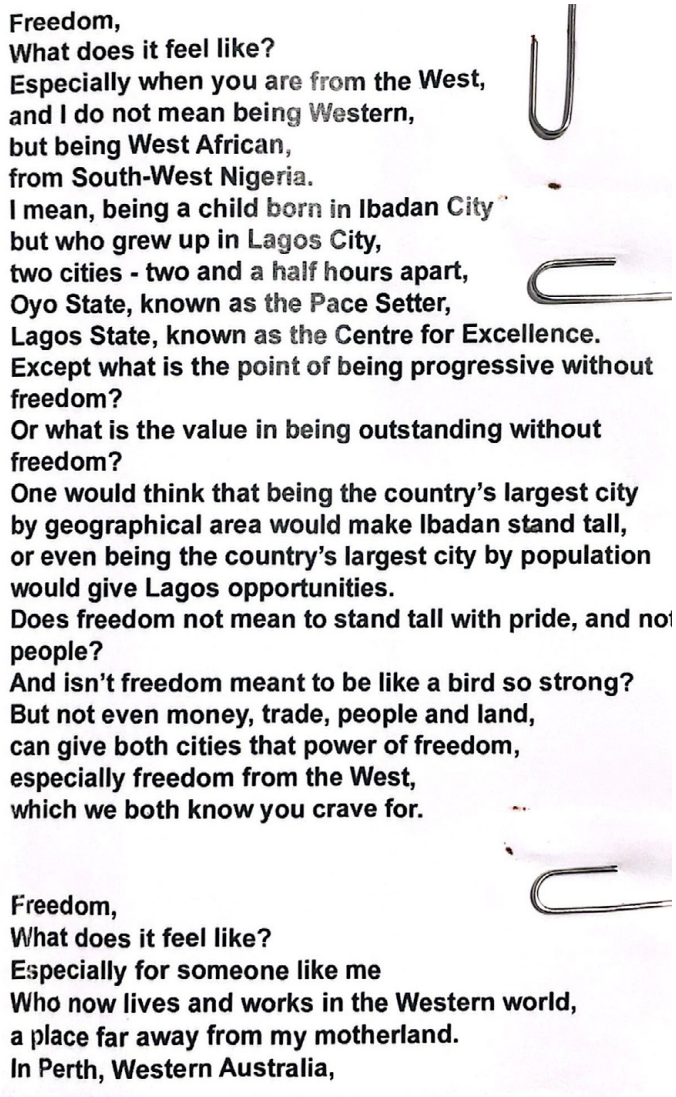
Freedom,
What does it feel like?
Especially when you are from the West,
and I do not mean being Western,
but being West African…

I employ a practice-led research approach and use an autoethnographic inquiry method. Through these methods, I examine the role of the embodied voice as an artistic,

Figure 1, Cover of Mohammed 'Ayo Busari's Performance Book, 2025, Digital image. Courtesy of the Artist

Figure 2., Performance Image of Mohammed 'Ayo Busari', 2024, Digital image, Image taken by Apurva Gupta. Courtesy of The Outsiders

Figure 3, Snapshot of Mohammed 'Ayo Busari's Performance Book, 2025, Digital image. Courtesy of the Artist



political, and cultural force in contemporary African performance. As a Nigerian-born creative producer, performer, musician, theatre maker, writer, and spoken word poet, my practice is deeply rooted in the sonic legacies of diaspora, belonging, memory, language, identity, culture, resistance, and ancestral knowledge.

The poem acts as an instrument, particularly a microphone, through which my voice, the voice of my drum, and the movement in my performance are interrogated as stages of both vulnerability and power. Freedom is, ultimately, a love letter to my voice and my identity. Writing, publishing, and repeatedly performing it have required immense courage, confidence, and growing strength. It has given me the power to speak

truths that were once silenced, to ask questions that once felt too daunting, and to challenge narratives and spaces that often discourage such confrontation. Each performance deepens this embodiment

My creative practice has always been shaped by my Yoruba ancestry, my Nigerian accent, and the silences inherited from colonial trauma. Most of my work emerges from oral traditions, rhythms of survival, and a refusal to dilute my voice for Western palatability.

Freedom as Poetic Testimony

Freedom functions as both testimony and critique, tracing my journey from Ibadan to Lagos, Lagos to the UK and later from the UK to Western Australia. It contrasts the promise of progress with the absence of liberation, asking:

What is the point of being progressive without freedom?

Or what is the value in being outstanding without freedom?

Here, freedom is not reduced to economic development, urban growth, or Western recognition. Instead, I articulate it as dignity, cultural sovereignty, and the right to stand unapologetically. I position freedom as an immeasurable condition - craved by cities, nations, and individuals alike.

Voice as Embodied Archive of Freedom

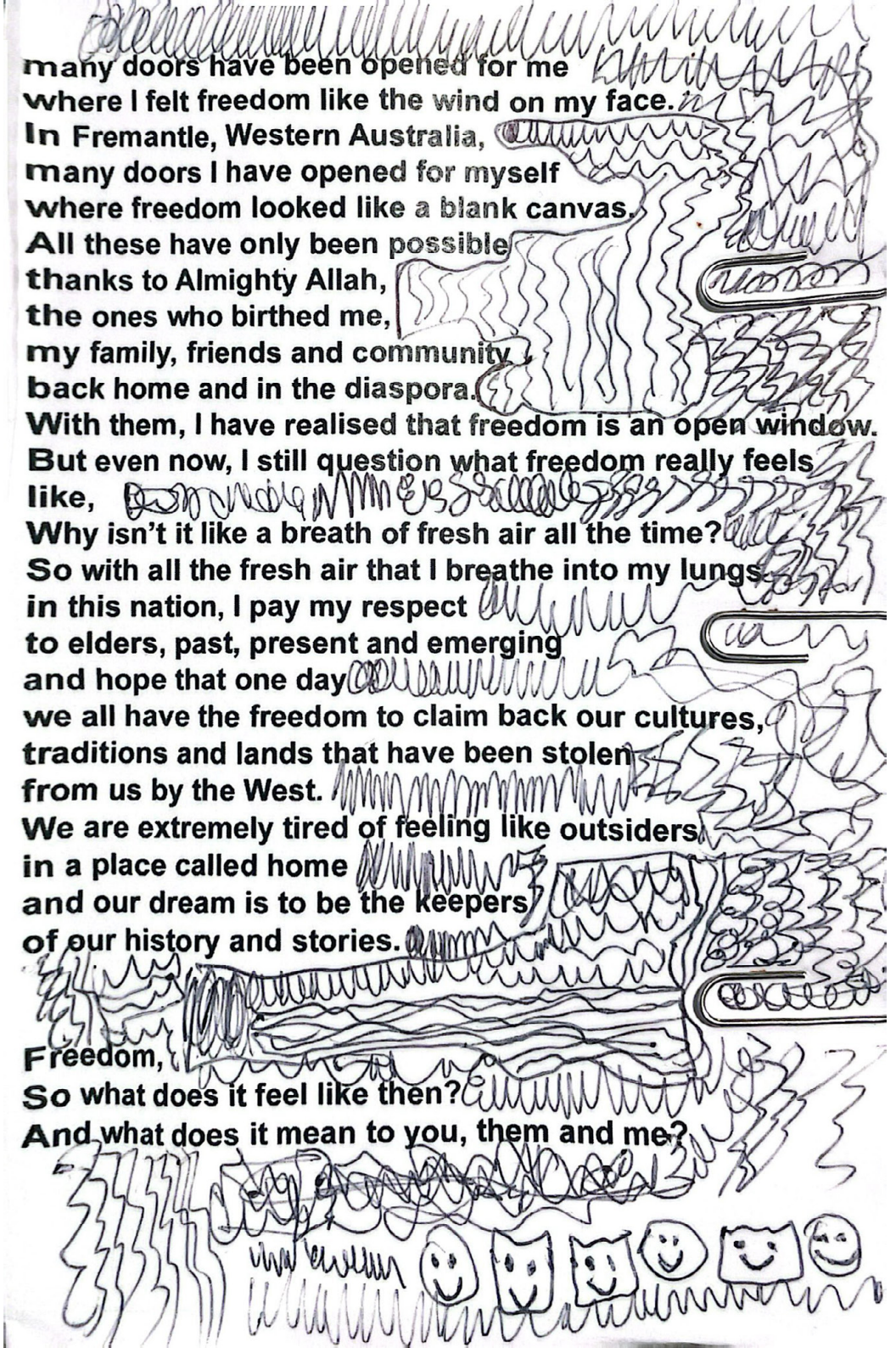
In my research, I approach voice as an embodied archive, rather than a neutral tool - a place where emotions, histories, and identities are continuously enacted through performance (Taylor, 2003). During performances, *Freedom* becomes a mode of protest, a declaration of survival, a form of remembrance, and a means of education.

Figure 4, Performance Image of Mohammed 'Ayo Busari', 2024, Digital image, Image taken by Apurva Gupta. Courtesy of The Outsiders

My embodied voice shelters the Yoruba intonation, which is echoed by the talking drum, my form of "Nigerian English," and the passed-down silences of displacement. Through performance, I stage freedom using three R's: rupture, rhythm, and resonance. This aligns with bell hooks' (1990) framing of language as a site of radical possibility and Fanon's (1952/2008) critique of colonial language as subjugation.

The performance unfolds as a testimonial monologue shaped by ritual and memory. The drum intervenes as a "third voice," non-verbal yet powerfully audible, extending the archive of embodiment.

Figure 5 (Pg. 42), Second snapshot of Mohammed 'Ayo Busari's Performance Book, 2025, Digital image. Courtesy of the Artist



The Talking Drum as Voice

At the heart of this work is the talking drum, which mimics Yoruba tonalities. During performance, the talking drum becomes an extension of my voice—an added layer of expression and amplification that carries emotional depth, cultural resonance, and linguistic complexity.

The drum "talks" when English stutters; it remembers when history fails; it redeems presence through vibration and rhythm. As both instrument and methodology, it embodies a sonic practice of freedom, operating as a call-and-response, an archive, a form of resistance, and a living link to ancestral voices.

Figure 6, Image of Mohammed 'Ayo Busari's Talking Drum, 2024, Digital image, Image taken by Apurva Gupta. Courtesy of The Outsiders

Diaspora, Belonging, and Sonic Resistance

Freedom also exists within diasporic contradiction. In Australia, I have opened doors for myself—sometimes freely, sometimes through struggle—but this freedom often feels incomplete, unsafe, or unwelcoming. My diasporic voice is frequently misread, exoticised, or tokenised in Western contexts.

Through this work, I resist assimilation (most of the time). I challenge the demand for legibility and stage freedom as sonic resistance: an insistence on being heard in my own cadence. I embrace accented English, Yoruba, and Pidgin as strategies of cultural affirmation, echoing hooks' (1990) notion of "radical possibility" and Ngũgĩ wa Thiong'o's (1986) call for indigenous language recovery.

The talking drum intensifies this resistance. Its tonal language unsettles Eurocentric definitions of communication and composition, improvising cyclical time, spiritual resonance, and ancestral presence.

Dramaturgy, Form, and Practice-as-Research

The Sound of Freedom is grounded in a practice-as-research framework, where performance serves as both a methodology and a means of knowledge production (Haseman, 2006).

Formally, the piece resists linearity. I blend dialogue, monologue, live drumming, and spoken word to mirror the nonlinear, rhythmic nature of memory, identity, and ritual. The talking drum punctuates as a third presence, offering rhythm where language cannot and resonance as a form of resistance.

Politics of Performance and Reception

After performances, I sometimes wonder: "*Are they clapping for me, or for their idea of me?*" This question points to the politics of reception. As a BIPOC (Black, Indigenous, and People of Colour) artist, I often navigate stages that grant visibility while imposing narrow frames of recognition.

I have learned to reframe applause not as validation but as an echo, another vibration in dialogue with my voice and drum. My performance is not a plea for recognition but an assertion of sovereignty. As hooks (1990) observes, the stories and narratives of marginalised communities are often absorbed through pity or curiosity. My work insists instead on truthful, unapologetic self-expression. The drum's presence becomes a cultural reclamation and sonic refusal.

Conclusion

The Sound of Freedom places voice as both metaphor and method for depicting identity, enacting resistance, and grounding belonging. Through my poem Freedom, the performance continually asks: *What does freedom feel like, and how does it sound?*

For me, as a diasporic artist, home is inextricably linked to the concept of freedom. Home is not geography but resonance, the echo of Yoruba tones, the cadence of Pidgin, the strike of the drum. To sound freedom is to create a home. To embody freedom is to reclaim history.

Ultimately, my voice is a combination of memory, archive, survival, and home. It is where the past vibrates into the present, where belonging is continually negotiated, and where freedom becomes a lived and embodied experience. The talking drum is not merely an instrument but a methodology: it speaks when English fails, remembers when history forgets, and vibrates with ancestral force. To play it is to return. To sound it is to survive.

Figure 7. Performance Image of Mohammed 'Ayo Busari', 2024, Digital image, Image taken by Eva Burkhardt. Courtesy of TAB Family

04

Quiet **thunder** and **honey**: Deep Listening to **First Nations' Voices**

Molly Schmidt

Author,
PhD Candidate at Curtin University,
& Forrest Research Foundation Scholar.

Black tea, no sugar.

Three teabags, brewed until tar-like, honey and milk.

These are the respective tea orders of Menang and Goreng Noongar Elders, Averil Dean and Lester Coyne. Although they adore each other, I see them on alternating days. Aunty Ave pulls up in her white Ford Falcon, always under the yellow flowering gum to the right of our driveway. She raps on the flyscreen, which thwacks against the wooden door. Mostly, I open the door into her smile. In my mental image of this moment, she is wearing red. Bright red. It suits her—her totem is fire.

Uncle Lester pulls up in his Land Rover, his dog jumping out before the engine is off. He doesn't need to knock. My dog gets a whiff of her canine friend and makes a hullaballoo at the front door. The dogs tear around the house—carpets sliding and human knees nearly buckling—while I put the kettle on. If Lester is in his hat and smart jacket, I know he's been at a Welcome to Country or important meeting. The days he's in a t-shirt are rare.

They are cultural leaders, custodians, Elders of the land I am lucky to call home – Albany.

Kinjarling.

They've asked me to record and preserve their stories. To write them, so you may one day read them. The process involves recognising the honour with a certain ritual.

Always tea.

Often, baked goods

Figure 1: Boola Miyel, 2025 © Joshua Booth

We take time to connect as friends, before we move to the study and take our places on either side of the microphone. They both have a preferred armchair. Uncle Lester's is the orange one with wide, wooden arms. Aunty Ave's is the smaller, chequered brown one, angled towards the window. I sit in whichever is free, while they speak.

They are using their voices, taking me on the journey of their life. Sometimes their voices take our bodies out of the study, and we travel to the places where their memories took place. Gnowangerup. Salt River. Cape Riche. Carnarvon. Broome. Bidyadanga. Wandagee Station. They take me back to mission days, to bush camps, to first loves, to damper that cooks on ashes. To gut-wrenching losses, to houses overflowing with pets, to pubs that won't serve *natives*. They tell me whatever they like, however they like. And then they leave, to go about their busy lives as Noongar Elders, balancing cultural advisory boards and Welcome to Countries with caring for great-grandchildren and driving people places and mowing the lawn at the Noongar centre.

After they've gone, their voices ring in the air and I cast a net and catch their words on a page. Carefully, I'll add and take and shape and weave the threads together. Then, I'll deliver the page to the Elder. Sometimes the paper goes back and forth and back and forth. Other times they merely nod, say, *Yes, that's it.*

So, I'm writing this from the desk that is usually dedicated to the stories of their lives. Today, there's a notebook on the desk with the words *cartographies of voice and power* scrawled across the page. After starting and scrapping multiple drafts of this article, I stop. I go to The Metamorphosis Project website and I watch a video in which literary editor, Clare Reid, says writers should place themselves *inside* their work—should venture down the rabbit holes of thought—should not back down, no matter how nuanced their ideas may seem.

I look back at my notebook. I circle one word. *Voice.*

The first voice I heard was my mother's. The reverberation from her sternum hummed within my own body. I felt the songs—the stories moved within me. Dad's voice was as deep as the night sky and it was in his arms, following the line of his pointed finger, that my first word was delivered to me. *Moon.*

I remember listening to voices on summer evenings when my bedtime came before the sun went down. When the adults sat on the wooden veranda in camp chairs around the barbeque and slapped mozzies from their thighs. Drawing to mind the faces of my parents' friends, as I heard the murmur of their words.

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As I grew, I learned to explore my voice on paper. Inside leather-bound journals that made the poems feel precious, my letters were looped and floral with youth. I picked flowers and pressed them between waxed paper and the pages of The Brothers Grimm. Then, typing. The satisfaction of words sprinting across the page, thoughts tumbling over each other.

Twenty years later, it wasn't flowers I pressed in paper, but voices. A job at the local newspaper became seven years at the ABC. The voices drifted off the page and onto the radio, and from the producer's booth, I heard the product a millisecond earlier than those listening from the cars that drove by the studio window. The big red DUMP button could silence the voices if they said things they shouldn't. I never used it. I liked hearing what people had to say.

Eventually, the voices drifted back onto paper and I worked less and wrote more. I started writing a novel—allowing my hand to be pushed across the keyboard by characters who had a mind, and heart, of their own.

I used my own voice in different ways. Poetry. Fiction. Journalism.

It was 2017 when I first noticed Cathy Coomer, standing quietly with her fingers looped through a construction fence at the Beeliar Wetlands, south of Perth. She was silent, but the voices around her were loud.

'No Roe 8!'

'Rethink Perth Freight Link!'

'Save Beeliar Wetlands!'

They held banners. Some locked themselves to trees in attempts to save them from becoming woodchips. I went weekly to start with, then more regularly. I fell in step with the protestors, wrote in my notebook, took photos, asked questions.

It was a long time before I spoke to Cathy Coomer. She was at the same place on the fence line, facing a big old paperbark tree.

'I was born beneath that one,' she said.

Figure 2: Cathy Coomer at Beeliar Wetlands, 2017 © Molly Schmidt

On the news we saw politicians, environmentalists, archaeologists, and local residents have their say about the controversial Roe 8 Highway project. But I learned the most from the people who knew that land like it was an extension of their bodies. It was the Whadjuk Noongar Elders whose voices I pressed in the pages I wrote. People who, I learned, were using their voices tirelessly to fight for their sacred land, but who were tired of not being heard. Another young journalist and I made our online debut with an article titled, *Beeliar Wetlands were our church.* It is a different story to this one, but it is the one that shaped my life and career, and determined the voices I would continue to choose to seek out, to listen to, to learn from.

Cathy Coomer's Birthing Tree became woodchips. So did many others.

There was a change of government. The road never went ahead.

As I write these words you are reading, I glance at my bookshelf. There is an old faded yellow jug, patterned with hairline cracks in the ceramic. The words *Castel Felice* stretch across the surface in a light grey print. It is the name of the ship that brought my father and his parents from Germany to Australia in 1961. When they arrived, they swallowed their German words, forced them to take the shape of the drawl they heard around them. Without their language, their voices changed. A new story began.

Something is poking out of the top of the jug. It is wool, plaited together in three vibrant colours. Red. Yellow. Black. The colours of the Aboriginal flag. Cathy Coomer made the woollen, scarf-like strands for her friends and family to wear at an art exhibition in Fremantle that featured some of her own work. I was touched when she called, invited me along.

It's been almost a decade since we watched bulldozers tear down the Birthing Tree. Years since that exhibition. Months since we've spoken. But her voice comes to me easily. Cathy's favourite way to speak is through her paintings. The slogans that others would chant at rallies—painted loud and clear and beautifully on canvas.

OUR FIRST NATIONS PEOPLE BELONG.
ALWAYS WAS, ALWAYS WILL BE.

I take the plaited wool, wrap it around the fingers of my left hand as I continue writing. I'm not in Perth anymore—I've returned to Albany, to the land of the Menang and Goreng Noongar people. Through my stint in news and media, I learned a lot about storytelling and hearing different voices. But over time, the quantity of stories churned out every hour and the sheer volume of voices required to produce a daily radio program set me on a different path. This path is slower, more deliberate. In 2023, my first novel, *Salt River Road,* was published by Fremantle Press. That story began with grief—the grief that wrapped itself around my bones after I lost my father slowly, to terminal cancer. With the freedom of fiction, I gave the grief to characters who expressed it in their own way—who gave me space to imagine, explore, fill gaps. I chose to base the story in the same place: Albany, but a different time: the late 1970's. And due to this setting, I spent years getting to know the Menang and Goreng Noongar Elders—the Traditional Custodians of the land that held my story. I wondered if they would want to see Noongar characters represented in a novel that was set on Noongar land.

In the literary world, the term 'own voice' refers to stories about people from marginalised groups, written by a person from within that marginalised group. It is generally agreed that

Figure 3: Noongar guide Larry Blight takes Molly on Country, 2019 © Molly Schmidt

it's ethically important to refrain from writing a story that is centred within a minority group that's not your own. To do so can be seen as cultural appropriation. Put simply, it can be seen as putting words in another's mouth without the relevant experience for this to be authentic. As a non-Indigenous Australian reader, I am deeply committed to buying, reading, and celebrating stories written by First Nations Australians. And, as a non-Indigenous Australian author, I wanted my work to be respectful. Whilst I had no intention of writing from the perspective of fictional Aboriginal characters, I didn't feel good about omitting Aboriginal characters from a story set in a place Noongar people have lived for millennia. So, I asked the Elders what they thought. 'Should a local novel written by a non-Indigenous author include Indigenous characters?'

Five different cultural leaders from across the Great Southern all said the same thing.

Yes.'[1]

What came next was years of collaboration and consultation with the Noongar community that directly influenced the story that became *Salt River Road.* You can read more about that process elsewhere, but the backstory is important because it led me to Aunty Averil and Uncle Lester who at different times and in different words asked me the same, enormous question: Would I, one day, help them write their own stories?

That question led to this moment: a thunderstorm on Menang country. Rain hammering on my study window. This notebook with the word circled. Voice.

I type and delete. Type and delete. Then realise my mistake.

There's tea, of course, and banana bread that

[1] It is of utmost importance to note that this is by no means a blanket statement, and if you are a writer considering these questions, it is the Elders of your town who should be consulted with.

is not my finest—a little lumpy, but they don't complain. Uncle Lester has brought flowers, which bloom out of the *Castel Felice* jug. He drags his chair over to sit right next to Aunty Ave. They lean their heads towards each other when they laugh, peppering the conversation with jokes and gentle prods at the other. The punchline of their squabbling is the sheer respect they actually hold for each other. I squirm while they read my draft of this article, Aunty Ave finishing one page and passing it to Uncle Lester before reaching for the next.

'So', I say when they've finished reading, 'I realised what was missing was *your* voices.'

By the time I turn the microphone on, Aunty Ave is already mid-sentence.

'Voice is power,' she says. 'If you can hold your head up and express your voice, talk with expression and tell the truth—that's what it's about. Expressing through your voice what you are feeling.'

Uncle Lester nods thoughtfully. 'The old people did it sitting around the fire. They sat around the fire and played cards and yarned. There was always respect for one another. None of this *my-view-is-more-powerful-than-yours* business.'

In direct representation of this, the Elders pass the conversation between each other, reflecting, nodding, listening, adding. While they speak, I engage in the Indigenous concept of Deep Listening. I listen with not only my ears, but my whole body. I feel the moment. I notice how the Elders move within it. Where they lean forwards, where they turn away. The way their hands gesture and contract, painting emotion that deepens the words their voices say.

'I love meetings where people disagree with each other,' Aunty Averil grins. 'Because that's what a meeting is for. For you to resolve that.' Her face turns serious. 'But with the way Noongar people have been treated since way back, a lot of Noongars aren't able to use their voices because they don't know how to let go of that feeling of being inadequate, you know?'

'Yes,' Uncle Lester says. 'To have a voice is privilege. Or, it means you have money. But money gives you control, and then it's no longer a conversation. Having a voice is more about getting up in a crowded room and when you've finished your piece, someone else is thinking, *I never looked at it like that*. Humour helps too.' He chuckles. 'Sometimes you get a laugh out of somebody, and it turns off the seriousness for just a fraction and it shows that, you know, we're human. We're the same. When I used to sit around with the old people when I was young, I used to kill myself laughing. Listening to those old people was like honey—sometimes it was quiet thunder—but other times it was honey.'

It's as if there's a campfire between us.

'Everyone can have a voice,' Aunty Averil says. 'But you have to learn how to use it. The very first time I started to talk in schools and stuff, I would choke on my own spit. It takes time to find your voice sometimes.'

There's a pause. I ask a question that has been niggling at me. 'What about in 2023, when Australia voted against an Aboriginal Voice to Parliament? Has that had an effect on your voice?'

Aunty Averil frowns with determination. 'I believe there's more power within the community. People are starting to band together and come out with strength in their wording, to be able to say what they should have, and how they should have it. We're stronger in our resilience.'

Figure 4: Averil Dean & Lester Coyne at the launch of *Salt River Road*, 2023 © Leith Alexander

'Voice is truth,' Uncle Lester says. 'But the truth is, that largely, the Voice [to Parliament] was dismissed because of all the lies that were told.'

Aunty Ave turns to Uncle Lester, lowers her voice. 'I would love to be able to sit across the table from a minister, I bet I'd have his ears ringing. I would really work really hard to convince him to listen and take notice of what I'm saying, you know, and I wouldn't allow him to leave until I was satisfied that he did.'

The moment continues. This is just a glimpse of it, a recording of the voices I am so lucky to be listening to. Before they go, I ask them a self-conscious question. As I work on their biographies, I feel the enormity of the responsibility to get their books right. The Elders have full control over the final product. They'll be named as co-authors and maintain full ownership of all cultural and intellectual property. They oversee every word written. But still—the nerves.

'I'm writing your stories, but what we want to shine through is your voices. Do you ever worry about a white woman doing this job?'

Uncle Lester, the sweet man that he is, answers quickly. 'Not from day one, no. It's our words, our voices, and you are being the glue. Gluing us together too.' He leans into Aunty Ave, prods her with his elbow.

Aunty Averil's answer is just as generous. I hold the words, like a talisman, for courage. She puts her empty cup on the table. 'So, yeah, Molly, you got what you need?'

I hope one day, when our work is done and their stories are books you can hold in your hands, you will hear their voices lifting off the paper.

I switch the microphone off, and the kettle back on.

05

Attenborough's Lesson in Values and Voice

Jay Freeman

Copywriter, editor and academic,
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Voice (/vɔɪs/ n.)–the literal sound of speech or the unique personality that emerges when someone writes or speaks. In copywriting –the particular combination of personality, rhythm, and intention that allows words to stand out, resonate and be remembered.

As a copywriter–and someone who's spent hours teaching students that voice isn't something to be shrugged at–I've devoted my career to thinking about, arguing over and defending voice. The right brand voice, I tell my clients, will transform your paragraphs from utilitarian text into something with life in it! Your words will leapfrog the competitors' dreary bleating and land squarely in your reader's ear. Voice is a powerful thing.

Yet although copywriters agree on this point, the degree to which it's possible to define written voice is one of the great questions of copywriting. To what extent can we create a set of rules that, once written down, allow anyone–regardless of medium, brief or mood–to reproduce a voice convincingly? This brings us to one of the most common requests I get from environmental brands: "Can you make us sound like David Attenborough?"

As a branding goal, it makes sense. Voice is a powerful instrument for science, and there are few voices in the world as recognisable as Attenborough's. As a communicator, he is sui generis (in a class of his own) adored by laypeople and experts alike. The public loves him for his wit and warmth and for making complex ideas feel clear, wondrous and accessible. Scientists love him because he was often the first stepping-stone in their careers–a gateway to lab coats and messing around in mangroves–and because, crucially, he never flattens the nuance. He knows his stuff, and he respects his audience enough to assume they can too. Most importantly, he interrogates humans' relationship with our planet–and invites us to do the same. Attenborough's voice, with its combination of scientific rigour, awe and inclusivity, hits the perfect note for environmental storytelling. What brand wouldn't want a piece of that?

Of course, there's a snag. Environmental brands' audiences are, more often than not, the same corporations whose land clearing and fossil fuel projects made reforestation necessary in the first place. Their survival depends on staying in the good books of destructive companies while also repairing the harm they've done. Their voices are stuck walking a tightrope. Meanwhile, Attenborough's voice–inseparable from Attenborough the human, untethered from corporate stakeholders and buoyed by a lifetime of personal conviction–can speak freely. His voice is his own and therein lies its irresistible power. Brands are non–human entities entangled in stakeholder politics. The people within them can admire Attenborough, but as we'll learn, the brands themselves can't mimic him.

Defining voice

To understand why Attenborough's voice is so maddeningly difficult for corporate brands to borrow, it's helpful to define 'voice' in a brand context. The good news is that we're already experts. Humans are natural communicators, and most of us are highly attuned to recognising tone and message in writing. We can identify people, their mood, intentions and values not just by the sound of their speech, but through the language choices they make.

In copywriting, we can develop and implement a brand's voice by thinking of the brand as a person. Its visual identity shows us what that person looks like, and its verbal identity

tells us how they sound. A brand's voice is a cocktail of *what's* said (the content) and *how* it's said (the grammar, rhythm, punctuation, etc.). These decisions shape not only voice but how audiences perceive a brand's character, intent and credibility. Therefore, excessive exclamation marks have the power to tip the tipple from dignified to downright silly.

But here's the rub, although we build brand voices with a person in mind (and surprisingly often that person is Hugh Jackman—the man's charming!), brands aren't actual people. They're entities that must maintain a socially constructed performance of professionalism in order to gain and keep clients. What counts as 'professional' varies by industry, audience and context, but in today's environmental agencies, it often means sounding objective and scientific. Passionate, yes, but not sentimental. Deeply knowledgeable about biodiversity, but careful not to assign blame for its decline. Attenborough's voice reflects his worldview because he's a human, not a leadership team armed with brand guidelines, and he's free to express his values through his linguistic choices. And once you learn to tune your ear for those choices—pronouns, the metaphors, the rhetorical flourishes—you'll never be able to unhear them.

Learning to listen

I'm a copywriter, but I've been writing in one form or another my whole life. I grew up in a family that loves books and pays close attention to the natural world. Those early influences shaped my personal grammar and, therefore, how I approach writing for clients about nature and science.

My granddad, 'The Mad Axeman', is a bush poet and legend in Western Australian bushwalking circles. He can recognise a stretch of the 1,000km-long Bibbulmun Track from a rock that looks to the rest of us like (sorry Granddad) a rock. He would vanish for weeks into the bush, often with only the landscapes for company, returning skinny, hairy, smelling of cheese and having written a poem about the adventures of a lusty pig. One of my uncles is a bushfire fighter, another worked in animal husbandry, and the third lives with an assortment of animals, including Nigerian Dwarf goats and a flock of geese whose egg-laying is so capricious that the only reliable collectors are the crows. Meanwhile, my parents, who live in Singapore, help care for the colony of drain cats outside their apartment. This practice is common for many Singaporeans, who see drain cats as valued members of the community whose survival depends on human responsibility. In family chats, we share photos of wild otters, hornbills and giant ferns erupting from drains. This is all to say that the natural world is interesting to us, and we consider ourselves responsible members of it.

Alongside this lived education, I grew up reading naturalists whose voices shaped my understanding of humans' relationship with the natural world. Gerald Durrell's superb, shambolic memoirs (who can forget the Rose-Beetle Man?) and Konrad Lorenz's *King Solomon's Ring* taught me that curiosity, reciprocity and cohabitation with animal subjects are not incompatible with rigorous scientific observation. Like my family, these writers didn't sentimentalise the animals they wrote about but treated them as fellow beings. Care and compassion were always paired with realism, including the decision to end suffering where necessary.

As I learned to be a copywriter and became more attuned to the nuances of voice, I realised that the naturalists I most admire—Attenborough, Durrell, Lorenz, Carson, Goodall, Audubon and Fossey—all share a voice that recognises humans as part of the natural world, not separate from it. We inherit its gifts, yes, but also its obligations.

This perspective isn't unique to naturalists. It is foundational to Indigenous philosophies across the world, which have always placed humans within ecosystems, not above them. Only recently has Western science caught up, dusted itself off and started exploring this revelation. Attenborough's voice expresses what has always been known: the supposed division between humans and nature is both artificial and disastrous.

Voicing values

Attenborough's voice may feel distinctive now, but it's really part of a much older tradition sometimes called 'nature writing'. The genre predates the buttoned-up objectivity of modern science writing by centuries, its lineage stretching from those well –thumbed childhood books I adored to Attenborough's writing and as far back as Darwin's *On the Origin of the Species*. Nature writing isn't defined by the *what* (trees, fungi, water snakes chasing marine iguanas) so much as the *how*. It frames the relationship between people and the natural world, and the stylistic choices it uses give that relationship voice. If science writing is, as Potawatomi botanist and author Robin Wall Kimmerer calls it, "a language of objects" (Kimmerer, 2013, p. 61), then nature writing is the language of relationship. It assumes that the other beings of the natural world are not objects (animate or inanimate) but active subjects, characters with agency, lives and experiences of their own. This way of looking (and listening) shapes how nature writers communicate.

Writer and scientist Sarah Boon suggests that science writing and nature writing sit on opposite ends of a continuum. At the science end, the voice prioritises facts and rigour. Slide a little closer to the middle, and you get 'human interest'. Keep going, and you arrive at nature writing, where human experience takes centre stage (Boon, 2019). Traditional science writing—the safe zone most environmental brands cling to—prizes objectivity, detachment and emotional distance. For Kimmerer, who trained as a botanist, this meant that "plants were reduced to objects; they were not subjects" (Kimmerer, 2013, p. 54). Accepting this framework, she writes, meant she "stepped off the path of Indigenous knowledge" (Kimmerer, p. 56). Nature writers, on the other hand, argue that science doesn't crumble when paired with other ways of knowing, whether that's cultural, artistic, philosophical or theological. *Au contraire*, it gets richer. Nature writers, free from the constraints of science writing, happily draw on the full toolkit of literary craft: rhetoric, metaphor, narrative, personification and sentence-level choices like punctuation, capitalisation, syntax and choice of pronouns. This is where panic sets in for brands. They imagine that to write in this style is to sound hippy—the dreaded word! What they usually mean by that is any mention of awe, art, responsibility or doing much beyond paying lip service to Traditional Owners. All of these, of course, would make the copy far more interesting and aligned with Attenborough's nature-writing style, but it would also be less 'safe'.

But historically, nature writing wasn't an unscientific affectation—it was the default approach to science communication. In *Ornithological Biography*, naturalist John James Audubon confidently attributes memory and happiness to ravens. Audubon's birds are

Figure 1: Dr Kat Taylor and Dr Anne Poelina on Poelina's 'sacred billabong', the Martuwarra. Reproduced with permission.

even religious, humbly praying to the "Author of their being", who is also—poor ravens—"their most dangerous enemy" (Audubon, 2022/1834, p. 73, 74). Modern nature writers are more cautious about anthropomorphism (Mabey, 2013), but they don't swing to the opposite extreme either. They reject the anthropocentric view that humans are the only beings with relationships, inner lives, motivations, pleasures and fears. Primatologists Jane Goodall and Dian Fossey, accused of an unscientific, feminine sentimentality and anthropomorphism at the time, broke from contemporary scientific style, writing about gorillas and chimpanzees not only as research subjects but as fellow members of a shared community (Masson, 2009).

These values are particularly alive in Indigenous nature writing. Many brands recognise the importance of Indigenous Knowledge, but they're often cautious about how to express it—sometimes because it's not available to them, or because their ability to consult with knowledge holders is limited. Sometimes, it's just easier to stay within familiar Western frameworks. Still, for those willing to express these values, it finds its way into prose through careful, deliberate choices of language. In a 2021 article comparing an Indigenous framework with Australia's National Water Initiative, the Martuwarra/Fitzroy River was listed not merely as a subject but as the lead author, alongside two human authors. This authorship "reflects the fact that people, land and water are not separate" (Martuwarra RiverOfLife et al., 2021, p. 41). Like many people in Australia, the authors (the Martuwarra, Dr Anne Poelina and Dr Kat Taylor) capitalised the Aboriginal Australian word 'Country' throughout, recognising it as "a living presence to which people relate" (Martuwarra RiverOfLife et al., p. 42).

Kimmerer makes a similar point about language, arguing that grammar itself can either hide or reveal our ethical responsibilities: "Maybe a grammar of animacy could lead us to whole new ways of living in the world… a world with a democracy of species, not a tyranny of one—with moral responsibility to water and wolves, and with a legal system that recognises the standing of other species" (Kimmerer, 2013, p. 70). Her suggestion is poetic, but also eminently practical. There is, for example, a growing global movement to recognise the personhood of rivers, led by Indigenous peoples across the world (Barkham, 2021). This movement understands that the words we use to describe natural beings—whether rivers, birds or mountains—are never just words. To call a river 'it' makes it an object; to call a river a person places it within a network of obligations and respect. Once you see the river as a fellow being, it becomes increasingly difficult to go on polluting and carving it up without a pang.

This voice and perspective can feel dangerous for brands used to the safe, air-conditioned atmosphere of Western scientific authority, but Attenborough's voice embodies these same values. He opens the windows, lets in the breeze and frames nature as kin, not commodity. When he met Fossey's gorillas, he despaired at their reputation as "brutal wild beasts" because "they were our cousins and we ought to care for them" (Attenborough, 2020, p. 59). He's called the natural world "a key ally" (ABC News, 2021)—an active partner in survival, not some storage cupboard of resources to raid when the mood strikes us. Again and again, he refutes the idea that the earth is ours to exploit: "We do not have a special place. We are not the preordained and final pinnacle of evolution. We are just another species in the tree of life" (Attenborough, 2020, p. 65). He laments that humanity has shifted "from being a part of nature to being apart from nature" (p. 125). That one word has catastrophic consequences.

Most environmental brands would nod along with all of this in principle, but they rarely express these values in their brand voice. At best, the sentiment languishes in a vision statement nobody reads. At worst, it's not there at all. And that's a deep shame, because nature writing isn't indulgent or sentimental; it's a legitimate, rigorous approach to science communication, and the values it expresses are fundamental to Attenborough's impact. He speaks as if our relationship with the living world matters, because it does. And that, inconveniently for brands who want Attenborough's voice but can't embody his values, is why people listen. If brands want to sound like Attenborough, they need to screw their courage to the sticking place and give voice to those values. The good news is that Attenborough can show the brave exactly how it's done.

Understanding Attenborough

Remember that a brand's voice is a combination of *what* they say and *how* they say it. If the values of nature writing define the *what* of Attenborough's voice—the worldview and priorities his work communicates—then what follows is the *how*. His voice is shaped by the values of coexistence, reverence, humility and responsibility, and these influence the sentence-level choices he makes in grammar, syntax, rhythm and diction. If I were to try to replicate Attenborough's voice, I would need to express both the what (the values) and the *how* (the language patterns that express them so successfully). And so, in the spirit of the great man himself—crouched in the snow, notebook in hand, documenting a penguin turning to a life of crime (Attenborough, 2011, 00:49)—I went

to his 2020 book, *A Life on Our Planet: My Witness Statement and a Vision for the Future*, to study his voice *in its natural habitat*.

I always start with punctuation, the gesture of writing—the nods, eyebrow-raises and hand-flourishes we make on the page. Nature writers have historically leaned on these verbal gestures to guide their readers. Audubon's *Ornithological Biography* (1834) is littered with exclamation points and question marks, and *On the Origin of Species* racks up no fewer than 330 em dashes (Darwin, 1859)—so much for the notion they were cooked up by ChatGPT. We can't literally fling our arms in despair on the page, but an exclamation mark gets the job done. We can't tap the reader on the shoulder and whisper, *slow down, this bit matters*, but a semicolon does a pretty good job. Both marks carry weight for voice. Too many exclamation marks can feel frenetic and unprofessional (one reason science writing tends to avoid them). But skip them altogether and you risk erasing urgency. Semicolons, on the other hand, can seem fusty and over-literary if not handled with care; hardly anyone knows how to use them, and using them incorrectly will rile up those who do. No surprise, then, that environmental brands aiming for an 'Attenborough voice' overuse semicolons and underuse exclamation marks. Attenborough himself uses both sparingly. Exclamation marks emphasise his strongest opinions, like "Earth may be a sealed dish, but we don't live in it alone!", and "We must rewild the world!" (Attenborough, 2020, p. 121). Semicolons appear 'incorrectly' (for pause and emphasis rather than to link independent clauses) and only when the sentence could benefit from a slower pace:

> "It was not laws invented by human beings that interested me, but the principles that governed the lives of animals and plants; not the history of kings and queens, or even the different languages that had been developed by different human societies, but the truths that had governed the world around me long before humanity had appeared in it." (Attenborough, 2020, p. 14).

Next, Attenborough adjusts his sentence lengths for rhythm, interest and impact. Science writing, by habit, leans long: clauses piled on clauses, all very carefully hedged and technical. But the communicator in Attenborough knows when to keep it snappy. Consider the impact of a series of staccato sentences like, "Yet no one lives in Pripyat today. The walls are crumbling. Its windows are broken." (Attenborough, 2020, p. 4). The rhythm shifts again when he moves into sentences that stretch beyond sixty words, giving his writing a rolling musicality. Long sentences invite reflection; short ones snap the reader to attention. Because there's no room for hedging or obfuscation, the short form lands with particular punch. For environmental brands, writing like this may be challenging. To share Attenborough's rhythm, you have to share his conviction. And that often means giving up the careful neutrality that a 'professional' voice tries so hard to maintain.

Attenborough's word choices, too, are emphatic, emotional and anything but neutral. He doesn't hesitate to lament "our destruction", to warn that things have gone "catastrophically wrong" (Attenborough, 2020, pp. 7, 93), or to (correctly) accuse fossil fuel users—from oil companies to superannuation funds—of "stealing" from nature (Attenborough, p. 131). It would take a fearless environmental agency, no matter how impassioned the individuals inside it, to use this kind of language in its brand voice. After all, that voice exists largely to win and keep clients, who probably wouldn't be too pleased to hear themselves called thieves.

It's equally unlikely that environmental brands would follow Attenborough's lead in employing words more commonly found in the vocabulary of faith than science. Like Lorenz, who describes the "magic" of nature (Lorenz, 1980, p. 7), Attenborough employs adjectives like "breathtaking" and "extraordinary" (pp. 157, 86). Brands, ever wary of sounding mawkish, shy away from these, even though emotional connection is essential to ecological storytelling. Even Darwin himself paused to admire the "beautifully plumed seed of the dandelion" (Darwin, 1859, p. 77). Nature writing has always allowed room for awe. Environmental brand voice does not.

One final example (though hardly the last) is Attenborough's use of rhetorical devices to sustain his tone. He uses metaphor, calling the ocean "the Earth's life-support machine" (p. 16), and scatters his work with rhetorical questions: "After all, wasn't the ocean vast, and virtually unlimited?" (Attenborough, 2020, p. 82). His pronoun choices speak volumes: like Audubon (1834), who consistently used 'he' for ravens, and Kimmerer (2013), who critiques the disrespect of calling living beings 'it', Attenborough rejects neutral pronouns: "Like all leopards, she hunts on her own" (Attenborough, 2006). Even capitalisation is an expression of his values to the letter. By capitalising 'Sun' and 'Earth' (Attenborough, 2020, pp. 7,5), he echoes Lorenz (1980) and Indigenous authors who capitalise 'Nature' or 'Country' to signal presence, agency and respect.

Attenborough's voice is only the visible tip of the iceberg. Beneath the surface lies the weight that keeps it afloat: his knowledge of the natural world, his personal values and these endless micro-choices in language that express those values. Brands—understandably enchanted by the visible part—want to mimic it. But without the mass beneath, the imitation is superficial. The iceberg quickly melts.

Shaping voice

It's hard to list these qualities to a brand eager to sound like one of its scientific idols without slipping into a cut-price version of Kipling's *If*. If you can hold your values steady despite stakeholder pressure; if you can express awe of the natural world when convention tells you it's unscientific; if you can admit our role in damaging the planet in order to help it heal; if you can drop the performance of professionalism and confess that you are human; then you'll have a voice like Attenborough's, and, what's more, you'll understand it!

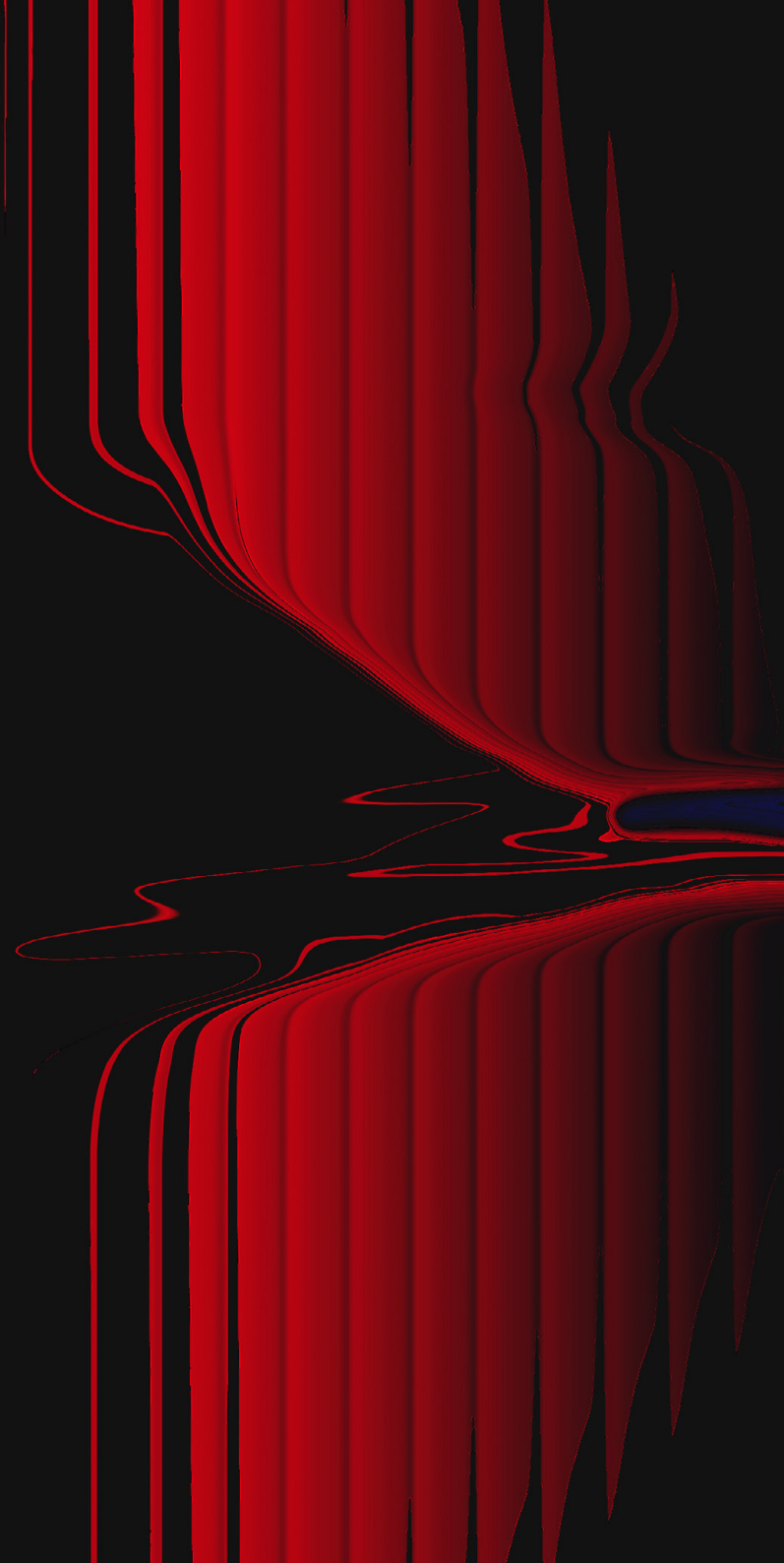
Brands say they want to sound like Attenborough. What they're really after is the effect of Attenborough—his authority, charm and ability to connect us with our world—without the messy, inconvenient necessity of actual belief, humility and reverence. And there's no shame in that. Most brands are run by perfectly decent people who, if given half a chance between budget meetings and quarterly forecasts, would happily embrace those values. But brands aren't people; they're commercial entities doing their best to appear warm and wise while relying on profit and compromising as a result. A brand can to borrow Attenborough's cadence, but it can't borrow his convictions. A brand can't

mimic his voice because it's inseparable from his humanity. You can't sound like Attenborough if you don't believe as he does. His values shape his voice.

So, here's what I tell brands who ask me to make them sound like Attenborough: let your brand voice wander as far as the constraints of your organisation will allow. Find the voice that is *sui generis* to your brand—unique, because what you do and how you do it is unique. And where you can, as a person, not a brand, in moments that fall outside the strictures of corporate formality, let your human voice out for a stroll. Allow Attenborough's influence to guide you, but don't copy him. Let your words carry the values you truly believe in, and trust that your own rhythm, sense of care and curiosity will carry the rest. If you get it right, your voice won't sound like Attenborough's or anyone else's. It will sound like something even more wonderful: You.

Figure 2: Jay Freeman with baby gibbon, c1999.

The **Metamorphic** Voice



06

The **unseen**, the **unheard** and the **imagined**: a survey of recent works exploring text and the voice

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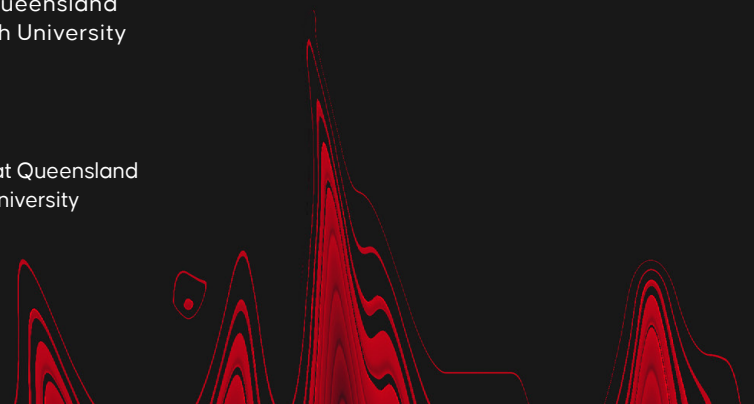


This article discusses a set of recent works performed by the New Music Ensemble GreyWing, that explore voice and text as the primary means to achieve unique performative approaches and situations. This approach draws from practices that emerged from the Post-War Avant Garde in music and visual art including Text Scores, Instructive scores and Conceptual music. The works, by Jennifer Walshe, Cathy van Eck, d'Heudières, and the three authors, primarily engage with the voice as a medium to navigate concerns of creativity, identity, gender, memory and technology through a diverse range of textual and verbal strategies.

In Walshe and van Eck, voice is unseen or obscured through ritual, unintelligibility, and technological mediation (Bosma, 2014; Walshe, 2016); in Vickery and d'Heudières, it is shaped by the performative pressures of unheard specifications delivered privately to performers via headphones - an "Audio-Score" (Bell, 2016; Sdraulig & d'Heudières, 2022); in Tomlinson and Griswold, it becomes a vehicle for imagination, memory, and cultural resonance (Hope, 2017; Tomlinson, 2022; Cossio, 2019). Taken together, these works demonstrate how the voice—whether audible, mediated, internalised, or even absent—functions as both material and metaphor, a dynamic site through which issues of power, identity, and belonging are articulated in contemporary experimental music practice.

The unseen: Jennifer Walshe's *He Was She Was* (2008) and Cathy van Eck's *Song no. 3* (2010)

Jennifer Walshe's *He Was She Was* (2008) and Cathy van Eck's *Song no. 3* (2010) broadly belong to a community of practices termed "the expanded field" (Krauss 1979, Ciciliani, 2017), musical works that stretch conventional categories, by combining and hybridising disciplines such as music performance, sound art, installation, multimedia, movement, theatre, site specificity, comedy and social commentary. In music, the expanded field genre is itself the successor to a range of experimental practices including Dada (1916), Instrumental Theatre (1960) and Fluxus (1961). Both Walshe and van Eck's works share a performative, embodied quality. They are "music that one plays" rather than "music one listens to" (Barthes, 1977, p. 149),[1] where the kinetic and visual aspects of performance are of equal importance to the sonic aspects.

He Was She Was (2008)

Walshe's *He Was She Was* (2008) combines a field recording with four performers – simply identified by their range (Soprano, Alto, Tenor Bass). The work consists of a restricted and minimal set of sounds and actions: Text of varying degrees of audibility and intelligibility; Pitched Sounds - repeated phrases of two long notes separated by rests in each of the four "voices"; Audible Actions - breaking twigs, lighting matches, breathing in and out of a paper bag, crumpling a paper bag; and a Field recording of a stormy night.

The spoken text is central to He *Was She Was*. While ostensibly spoken to the audience, it is ambiguous whether it is directed internally or in dialogue with an unseen other. It comprises 22 statements, each beginning "s/he was the kind of guy/girl who…", whispered "very quickly", "very slowly" or spoken quietly at normal speed. The statements arguably fall into 4 categories (non-sequiturs, neutral statements, observations and criticisms) but are in general what might be termed "post-romantic-relationship" evaluations.

The statements are distributed amongst the performers slightly asymmetrically: Soprano has

four "he was" statements delivered at normal speed; Alto has four "she was" statements delivered at normal speed; Tenor has twelve statements (five "she was" and seven "he was") whispered very fast and Bass has two "he was" statements whispered very slowly. In addition to there being thirteen "he was" statements and only nine "she was" statements, the statements themselves could also be understood as "slightly asymmetrical": the only unambiguously critical statements (albeit relatively mild) are about the "guy", for example: "he was the kind of guy who'd give you wrong directions and brag about it later". Asymmetry is also embedded (albeit less overtly) in the musical structures. The consistency of the work's asymmetrical construction is curious, and close to the boundary between intentional and coincidental, perhaps outlining an imbalance in the work that reinforces its emotional fragility.

The voice here has two, sometimes independent functions. The soundscape is relatively noisy, and the voice is always presented quietly, in some cases non-naturalistically fast or slow, so that at times it contributes as a sonic texture –clearly speech but often unintelligible, while at other times it is clearly comprehensible. Unintelligible or not, the voice is always imbued with meaning beyond its sonic texture, as Krämer has observed it is "a trace of the body in the language (...) It expresses the unsayable, that is, shows what speech conceals"[1] (2015 p. 340). Walshe has made a similar and even more pertinent and expansive statement on the voice:

> Gender, sexuality, ability, class, ethnicity, nationality – we read them all in the voice. The voice is a node where culture, politics, history and technology can be unpacked.
>
> (Walshe, 2023)

In the GreyWing performance, the four voices were provided by the (usually unspeaking) female flute and harp players and male electric guitar and bass clarinet players, all "readable" in Walshe's sense of the word, by the audience.

Walshe has shown a fascination with the idiosyncrasies and "the physicality of human behaviour" (Saunders, 2016, p. 149) in numerous works, including *ALL THE MANY PEOPLS* (2011) which uses text sourced from a wide (and sometimes dark) range of internet sources; The Beholder (2015) which explores the human tendency to anthropomorphise objects and the resulting behaviours; and perhaps most notoriously in her 2003 multimedia Barbie opera *XXX_LIVE_NUDE_GIRLS!!!,* in which she derived the plotlines of the libretto by interviewing "many children and adults about the stories that they enacted with their Barbies" (Macklay, 2018, p. 9).

It is this quirkiness of pre-adult behaviour that appears to be the subject of *He Was She Was*, in particular, the ritualistic behaviour that sometimes follows adolescent breakups, enacted here by the Soprano and Alto performers who are instructed to:

> make sounds as follows: read the text aloud in a low gentle voice, not too rushed, *mp*. Strike a match alight as you begin reading each sentence, blow the match out as soon as you have finished reading each sentence. (Walshe 2008)

These repetitive gestures – lighting a match, reading a "s/he was" declaration in a low gentle voice and then extinguishing the match – align with Demmrich and Wolfradt's description of the function of adolescent ritual behaviours of this type, "burning a photo of an "Ex"" or its contemporary equivalent "blocking" and "ghosting" on social media (Lenhart et. al., 2015), as and "emotion-regulative and self-reflective" (2018) form of symbolic destruction (Tiersma, 2015). The "post-break-up" ritualistic atmosphere also is symbolically emphasised by actions performed by the Tenor – the first action in the timeline is literally the sound of "breaking twigs" and the Bass who performs the anxiety-reducing technique of breathing into a bag, similar to "box breathing".

The ritualistic qualities of the work – "predefined sequences characterised by rigidity, formality, and repetition that are embedded in a larger system of symbolism and meaning, but contain elements that lack direct instrumental purpose" (Hobson et al., 2018, p. 261) – are emphasised by the score of *He Was She Was*: a schedule of precisely timed events, with performer parts indicating the onset of each event in minutes and seconds (See Figure 1).

It is important to note that the highly formalised structure and collection of sounds used in He Was She Was are ambiguous enough that many potentially meaningful interpretations are possible. The work is very short – 5 min 10 sec, and this short duration tends to downplay the ritualistic qualities that might be more obvious in a longer and more repetitive work.

[1] "Spur des Körpers in der Sprache (...) Sie bringt das Unsagbare zum Ausdruck, zeigt also, was die Rede verschweigt"

Time	S	A	T	B	CD
0'00"	start stopwatch	start stopwatch	start stopwatch	start stopwatch	begin CD
0'10"	[piece begins]	[piece begins]	[piece begins]	[piece begins]	sound of rain fades up slowly
0'25"					sound of rain, mf
0'44"			break twig every 7 to 11 seconds		
1'10-12"	play pitches	play pitches			
1'30"				breathe in and out of paper bag	
2'25"			whisper text very quickly	crumple up paper bag/	
2'45"			stop whispering	throw bag	

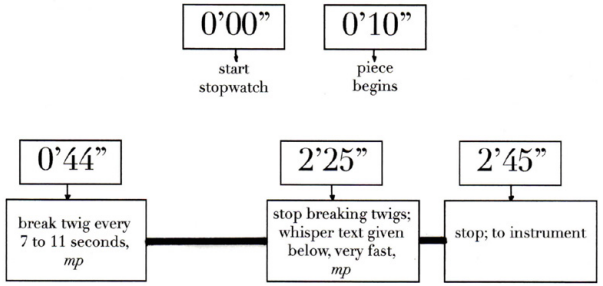


Figure 1. Jennifer Walshe – *He Was She Was* (2008), a. Full Score table of events (excerpt) and b. Tenor part (excerpt) © 2008 Jennifer Walshe.

Figure 2 (Top & Bottom). Cathy van Eck - *Song no. 3* (2010), GreyWing Performance by Kirsten Smith, left: powered speaker assembly and face attachment, right: performance from the concert [text], © 2019 photos by Lindsay Vickery.

***Song no. 3* (2010)**

The subject of Cathy van Eck's *Song no. 3*[2] (2010) is perhaps less ambiguous: the exaggerated gesture language of both the pop and opera Diva and its contrast with the "actually" absent voice of the performer. The work's satirical intentions are however, kept very deadpan throughout, opting to present the performer as a surreal almost puppet-like or cartoonish character, dressed in the nondescript anonymous black of the theatre technician or puppeteer, with her face obscured by a large sheet of white card, rather than the elaborate costumes, wigs and makeup of the operatic and pop soloist.

Van Eck's oeuvre shares some territory with Walshe's *New Discipline* (theatrical presentation, absurdist

[2] The title may be a nod to then ubiquitous post-Brit-Pop anthem Song no. 2 (1997) by Blur.

scenarios, everyday objects and multimedia) but is more explicitly based in technology. In particular the mediative potential of microphones and loudspeakers (van Eck, 2017) to replace the human performer as performative agents in themselves.

In this work *about* the voice there are no intelligible words, in fact the performer is herself silent with the "vocalisations" being produced by a speaker attached to her face that protrudes through the white card (See Figure 2.). This surreal character "sings" by changing the proximity of the speaker and a hand-held microphone, providing the opportunity for choreographed hand/arm gestures. Here the "arm gestures normally used by singers as a byproduct of their singing performance are used as a means to control electronic sound" (van Eck, 2019).

This situation has implications for both the performer and the audience. The performer is deprived of many of the signifiers of identity: a mouth and voice, eyes, a face, a costume and mobility (the microphone and sometimes the loudspeaker are both tethered to the computer by cables). The performer's anonymity permits the chameleon-like "shifting from one to another identity" (van Eck, 2017, p. 73), in which the performer's gestures evoke diverse situations: the "introductory concert spiel", the opera singer, the rock singer, the soundcheck, the disturbing inability to speak in dreams (Tait, 1923), and other impossible liminal conditions. In performance, the work moves fluidly between each situation through an interplay between the performer and the software:

> The piece is a mixture of your gestures changing the sound you control and a timeline which changes the sound, controlled by the computer. By rehearsing the piece an organic unity between these two processes should be achieved (van Eck, 2019).

Van Eck simply provides an ordering of the gestures in each section, and the performer develops their own performance practice incorporating a more-or-less theatrical transition between each gesture/sound set: Talking Noises, Clicks, Clicks and Voice, Singing Noises, Opera Singing and Reverse Singing.

The audience interpretation of the work is potentially unmoored by the lack of signifiers of identity and is left to ponder the politics of representation in the strange spectacle they are witnessing. They are left to interpret the neutral figure behind the blank sheet purely on the basis of movements and arm gestures and their relationships to the emerging soundscape. The histrionic operatic singing gestures are linked to siren-like sounds that are transformed by the changing microphone proximity, while the extroverted motions of the Pop singer increase the volume of a sort of howling wail the further the microphone moves from the speaker.

Bosma observes a critique of the "feminine role of singing" (2014, p. 4) in the contrast between this non-descript character and their attention-demanding movements are driven by the centrality of the gestures:

> The stereotype of woman as visual object, exemplified in Western classical music by the female soloist in evening dress with low cut neckline, bare shoulders and high heels, is countered by van Eck's neutral black clothes and by hiding her face behind a screen. (Bosma, 2014, p. 4).

Both Walshe and van Eck situate their practices at the intersection of music and performance and in these works, they foregrounded the embodied, ritualised, and ambiguous qualities of voice and gesture. Both composers explore the tension between real and metaphorical visibility and invisibility through gestures that teeter between ritual and parody. In both cases, the audience perceives the body as the primary site of meaning, even as sound is displaced, fractured or rendered ambiguous.

The unheard: Lindsay Vickery's *Un Paso al Abismo* (2018) and Louis d'Heudieres' *Laughter Studies 3* (2016)

In Louis d'Heudieres' *Laughter Studies 3* (2016) and Lindsay Vickery's *Un Paso al Abismo* (2018) the human voice is the primary medium for performance. But the performance itself is coordinated by voices unheard by the audience – delivered privately to performers via headphones as an Audio-Score (Bell, 2016). Bell traces the Audio-Score's origins to the click-track – a practice invented by the US film industry in the 1930s to provide performers with a steady series of metronomic clicks via headphones to synchronise musical performances with fixed media.[3] In practice, the Audio-Score has evolved to include a range of other kinds of acoustical messages. Bhagwati (2018) and Sdraulig and Lortie (2019) have both created categorisations of the types of recorded information found in the Audio-Score. These can be summarised as either verbal or sonic:

Verbal

Orientation Cues: ie "One", "Two measures before A", "Part Two".
Instructions: ie "Begin playing", "Imitate", "describe".

Sonical

Orientation Cues: ie metronome click, bell.
Recorded Sounds: to be imitated, interacted with or used as exemplars.

***Un Paso al Abismo* (2018)**

The title and choice of subject matter of Vickery's *Un Paso al Abismo* (2018) stemmed from the discovery of a technique similar to the text-driven "Audio-Score", which was developed by the Mexican company Televisa to reduce the recording time for Telenovelas (Mexican Soap Operas) such as *Un Paso al Abismo* (One step from the Abyss) (1958-9):

> A Mexican engineer invented an electronic earpiece for instant communication with actors that became a standard and somewhat unique element of the Televisa production process. Performers could be fed their lines, either between takes or while taping was in process; as a result, the speed of recording was greatly enhanced (Paxman, 2003).

This system became known in English as IFB (Interruptible Foldback) (Capretta, 1994, p. 3) and remains a staple of live television studio production such as Broadcast News.

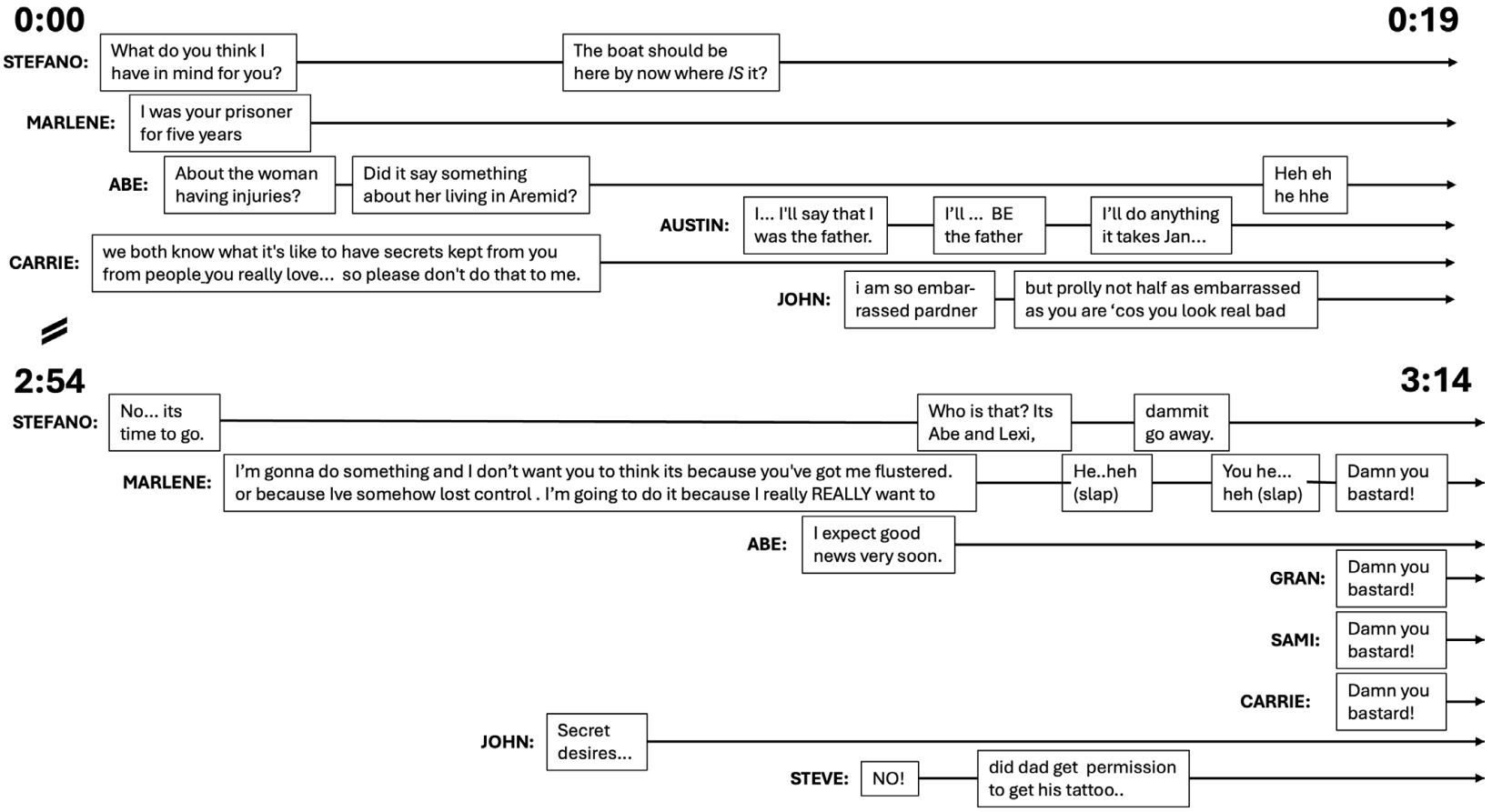


Figure 3. Lindsay Vickery – *Un Paso al Abismo* (2018) (excerpts), transcription of timestamps 0:00-0:19 and 2:54-3:14.

[3] The term "Audio-Score" first seems to first appear in the literature in an interview with performance artist and technologist Laurie Anderson about Robert Wilson's production Alcestis (1986) (Fuchs et. Al 1986).

In Vickery's work *Un Paso al Abismo*, eleven performers imitate as faithfully as possible excerpts of recorded dialogue from the long-running (over 150,000 episodes (Lewis 2024)) US soap opera *Days of Our Lives* (1965–). The recordings are essentially collages prepared by the composer, focusing on the infamous "latent hysteria" (Blake, 2016, p. 239) of Soap Opera dialogue. The Soap Opera *Days of our Lives* was chosen as the subject matter because of its renowned excursions into "heightened reality" (Robson, 2007, p. 244) and subplots that veer into the "fantastic and the supernatural" (Elliott-Smith, 2014, p.111). plot lines: the machinations of the villain Stefano DiMera[4] (1982-), the love "square" of half-sisters Sami and Carrie Brady and half-brothers Lucas Horton and Austin Reed (1993-), various "doubles", amnesia bouts, long-lost brothers and fathers assigned to various children, and perhaps most infamously, Marlena Evans and then Celeste Perrault's possession by the forces of evil (1995) (Elliott-Smith, 2014).

The performers for *Un Paso al Abismo* are expected to reproduce the theatrical delivery, timbre and dialect of the Soap Opera actors as closely as possible, with the Audio-Score expected to function as a set of cues or even an aide-memoire, as they were in the Televisa telenovelas. Sdraulig and Lortie (2019, p. 79) categorise this form of Audio-Score as "Rehearsed Emphasis/High-fidelity reproduction" in that the performers spend time practising the timing and execution of their part, rather than reacting to the Audio-Score in real-time. The Audio-Score parts were assembled directly in a Digital Audio Workstation from a set of samples of dialogue from the Soap Opera. The samples were chosen as exemplars of Soap Opera tropes, for example:

> **Stephano:** That was too close. (ah, breathes) Abe and Lexi could have ruined my entire plan (breathes) thank goodness nobody knows about this secret tunnel... except for the "lady in white". (Vickery, 2018).

The performance depends on the audience's ability to detect dialogue "codes" between the conversations, even in a sonic environment consisting of juxtaposition, overlapping and disruption of sequential dialogue, non-sequiturs and narrative. It of course also relies on the juxtaposition of cultural hierarchies of "low" melodrama versus "serious" music and the camp excess of the performance practice in the context of a "new music concert".

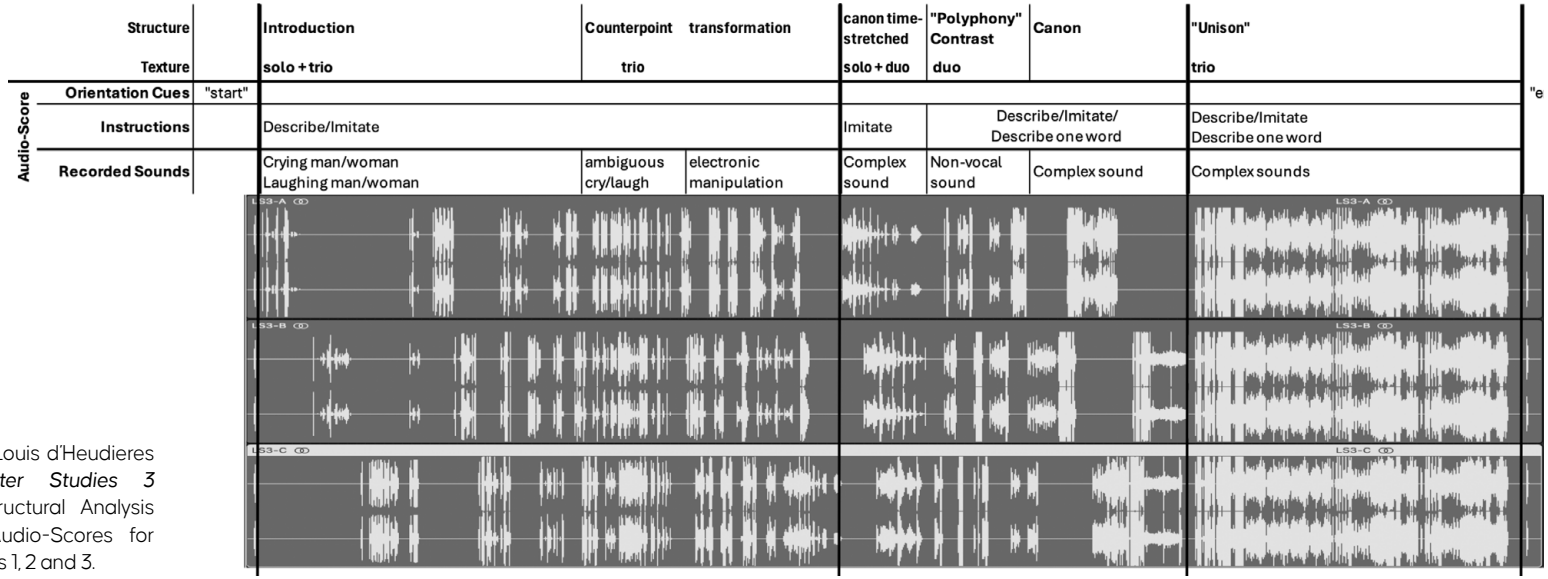


Figure 4. Louis d'Heudieres - *Laughter Studies 3* (2016), Structural Analysis of the Audio-Scores for Performers 1, 2 and 3.

Figure 3. is a transcription of the Audio-Score showing the opening, comprising the juxtaposition of narrative threads – in effect and introduction of sonic "themes" differentiated by dialogue "codes": Stefano and Marlene (villain and victim), Carrie (manipulative) and Austin (pathetic pleading) and the section beginning at 2 min 54 sec illustrating a more orchestrated "musical" crescendo of activity, culminating in four of the female characters crying out "Damn You Bastard" simultaneously (See Figure 3).

***Laughter Studies 3* (2016)**

In Louis d'Heudieres - *Laughter Studies 3* (2016), three performers respond in realtime to Audio-Scores in their headphones that require them to either "describe" or "imitate" (entirely vocally) varied sonic examples. This performative situation operates (for the most part)[5] as what Sdraulig and Lortie term "Reactive Emphasis", in which "instructive/ performative prompts" are used to elicit a "real-time improvisatory response to sound/ performers cannot hear or infer ahead" (Sdraulig and Lortie, 2019, p. 78). The situation is an example of what Saunders terms a "self-evident process", a work that makes its "processes self-evident [to the audience] through actions" (Saunders, 2024). The performers' attentive listening through headphones and the resulting reactions, is transparent enough that the audience can presumably deduce that they are receiving the same prompts and can evaluate the differences in their responses (often to comic effect).

Two instructions in particular benefit from "real-time improvisatory response", particularly in light of d'Heudieres score instructions:

[4] The "Soap" character who has (apparently) died the most times (a competitive category): by fire, drowning, gunshot, explosion, stroke, brain tumour, and heart attack (Saperstein, 2016, Gass, 2015 and Floridi, 2018). The character even outlived his original actor Joseph Peter Mascolo and returned to the soap in 2019 via an implanted chip in the body of an existing character Steve "Patch" Johnson, billed as "the new Stefano DiMera".

[5] d'Heudieres does suggest that some sections be rehearsed as they benefit "from interpretation beyond merely reacting to the sounds" (d'Heudières, 2020, p. 96).

> "describe" – "you should be talking continuously as long as there is sound playing (...) like a stream of consciousness"; and "describe with one word only" – "go with the first word that pops into your head". (d'Heudieres, 2016)

The instruction to "describe continuously" creates the "real-time" situation in which each performer, unaware of the duration of the sound, must keep improvising descriptive words for the sounds that they are hearing until they conclude.

The instruction for "describe with one word only", also adds a degree of performative pressure, like a psychological "word association" test, for the performer. This comes into play materially in the final section, in which all three performers are receiving the same verbal and sonic prompts.

Laughter Studies 3 focusses only on everyday and emotive sounds (d'Heudieres 2020). The emotive sounds include recordings of a wo/man Crying or Laughing in varied intensities, in addition to a third state that d'Heudieres calls "Cry-Singing" (2016). This sta0te presents to the performers as ambiguously between Laughing and Crying (and is therefore puzzling for them to accurately describe and imitate in real-time). The "everyday sounds", varying between 2 and 37 seconds, are sometimes manipulated through processing effects such as pitch-shift and time-stretch, and include sounds that are both difficult to describe and vocally imitate – for example sounds approximating clattering cutlery, footsteps on twigs, a drumbeat, a double bass and a cork being removed. As the recorded sounds become more ambiguous and difficult to describe, the performers involuntarily begin to add ""non-lexical interjections ('uh', 'er', 'um'), awkward pauses in the middle of sentences and frequent involuntary hand gestures in the performers' interpretations" (Sdraulig and d'Heudières, 2022, p. 25).

Despite the restricted means - the performers receive only three types of instruction, and the performance is timbrally confined to the sounds of the human voice – Laughter Studies 3 achieves a complex structure. The structure

Listen to the sound of urgency	Listen to the sound of children leaving the classroom	Listen to the sound of water as it runs over stones
Listen to the sound of your Grandmother's kitchen	Listen to the sound of happiness	Listen to the sound of yourself, crying
Listen to the sound of the waves as they touch the sand	Listen to the sound of your first car.....on gravel	Listen to the sound of rain, when it has stopped

Figure 5. Nine of the sixteen prompts in the score of Vanessa Tomlinson's ***Nostalgia*** (2013-)

references a range of typical musical tropes: an opening "introduction of forces" considers every potential "micro-textural" combinatorial possibility of performers and instructions (d'Heudières, 2020, p. 88); counterpoint, transformation, canon/polyphony and a concluding tutti (See Figure 4.).

Unlike *Un Paso al Abismo*, "the acts of vocalised mimicry in *Laughter Studies* are specific, personal, and nonlinguistic. They are not signifiers in a socially mediated game of linguistic communication, but rather vocal attempts at replicating sonic phenomena" (d'Heudières, 2020, p. 70). This abstraction is reinforced by the non-theatrical presentation of the performers, who are instructed to "face the audience and look at the top of their heads when performing" with a poised and confident body language (d'Heudières, 2016), while being instructed to undertake vocal tasks that are at first challenging and finally physically impossible to perform.

In both *Un Paso al Abismo* and *Laughter Studies* the audience are invited to speculate on the unheard stimuli that shape a purely vocal performance. Both works exploit the Audio-Score as a vehicle to explore juxtaposition, narrative disruption, improvisatory pressure and the psychological dimensions of vocal performance. The performative situations are similar, but presented in the case of *Un Paso* in an overtly melodramatic, theatrical and comedic context in contrast to the more abstract, absurdist spectacle of *Laughter Studies 3*.

The imagined: Vanessa Tomlinson's *Nostalgia* (2013-) and Erik Griswold's *Stars of Ours* (2013)

In contrast to the previous works, *Nostalgia and Stars of Ours* do not involve technology of any kind, instead creating a situation that informs and reinforces the intimate acts of imagining sound that are evoked in both the performers and audience. The two works emerge from the two contrasting Text Score traditions: Tomlinson situated within the lineage of "allusive" or "poetic" text scores and Griswold a clear descendant of the "instructive" text score.

***Nostalgia* (2013-)**

The score for Vanessa Tomlinson's *Nostalgia* (2013-) consists of text prompts that are used as a preparation for improvising. The series of instructions invoke imagined memories of a sound, and require the performers to navigate these externally soundless prompts live under the gaze of the audience. There is no single version of the work, as the score – multiples of sixteen prompts sorted into sets of six cards in random order – gives rise to a complex system of possibilities. This extends the definition of a text score that "provides the template from which a performance can begin" (Hope 2017 p. 36). Here the score of Nostalgia sets the conditions for the musicians to get ready to play. Rather than this preparatory process happening in private before a concert begins, the audience is watching the performers prepare to play, by adhering to the text score prompts, as they individually listen to "imagined" sounds.

Nostalgia extends our understanding of works without intentional sound, like John Cage's *4'33* (Cage 1952) and much of David Dunn's work that sets "in motion highly targeted, context-sensitive strategies for sonic engagement with existing ecosystems" (Tucker and Hayden, 2018). This lack of musician-led sound does not necessarily correspond to silence. Instead, the performers are listening to the place, the space, the ambient sound, the weather, the critters

and human movement. In *Nostalgia* the focus is not so much on this sounding environment, but on the incredibly intimate experience of the audience listening to the performers listening.

The listening prompts are all based on imagination, something the composer has been engaged with in many compositions since composing *Nostalgia*; "I have been overtly interested in imagined sounds for the past 9 years – since I composed a piece called Nostalgia that asks the audience to perform the work in their imagination" (Tomlinson, 2022). (See Figure 5.).

Set on small cards 50mm x 20mm, these prompts are read one at a time, until a small cue – a sound, or a marker delivered by an ensemble leader – instructs the performers to move on to the next card. These transitions happen after 30" - 60", and the performers are requested to sonically transition in their minds from one sound world to the next. Each text prompt requires a multi-sensorial gateway to reconstruct a sonic memory. Take for instance "imagine the sound of your grandmother's kitchen". For many the sound may be inaccessible until one begins to re-construct a visual outline, or an olfactory memory. The performer may need to hone in to a specific time, celebration, or event that helps unlock something particular about sound in that location. Which grandmother, which location, which memory is just one of the variables in this work.

Transitioning forward to the next prompt requires significant navigation. A subsequent prompt may be *Listen to the sound of urgency.* Again, the breadth of possibilities is wide open, relating to personal contextual experiences. The ordering of the cards may lead one to transition directly from memory 1 to memory 2, or they may be unrelated. Remember that the audience is observing this process, happening in real time in front of them. Each performer is simultaneously locating different sonic memories with different prompts. At the end, after 6 cards, there will be a card that says "PLAY". "Once you start playing, try to resist joining the ensemble for as long as possible. Use your imaginative listenings as inspiration for playing. The piece finishes when (you) are ready" (Tomlinson, 2013a).

At this moment it seems like the performer is seeing their instrument for the first time, transformed by the listening process, and unsure of how to navigate the chasm between internal listening and external sound-making. Each sonic gesture now carries different weight, like walking after taking off a heavy backpack carried up a mountain – needing to redistribute your balance in this new body.

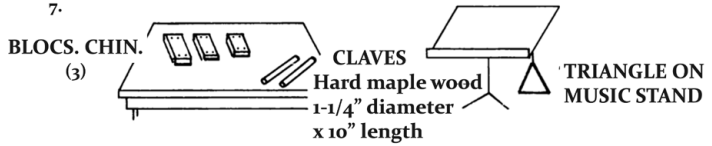
The performers were tasked with "locating" sound through memory, experience and context. The sonic residue discovered, is now externally sonified, as the performer listens and plays their way through multiple paths – much as one navigates through what Tomlinson refers to as *The Museum of Listening.* This is described as listening with "a labyrinth of routes through which sound can be experienced which is always in flux and in motion. The threshold of entry and exit is important in this listening environment, and the self-determination of the listener is also vital" (Tomlinson, 2022).

The listening prompts in *Nostalgia operate* in the same way as those from a related work for audience called *Music of the Imagination* (Tomlinson, 2013b). Tomlinson and Coessens describe this text score as being organised into three different perspectives on listening: *Material listening* – listening to a particular or fixed sound/object, which can be verified, recorded, documented, and listened to from an external perspective; *Experiential Listening* – relying on personal, private memories of lived experience, and relationships; and *Conceptual Listening* – intangible and transcending any specific situation. (Coessens and Tomlinson, 2019) These categories relate back to, and extend the concept mentioned earlier around everyday and emotive sounds (d'Heudieres 2020).

Nomenclature of instruments

1. Crash Cymbal – Bass Drum - (very deep) a) from 7 to 9 Cencerro (muffled) k)
2. Gong - Tam-tam (high) Tam-tam (low) b) from 7 to 9 Cencerro (muffled)
3. 2 Bongos c) - Side-Drum d) 2 Bass Drums (medium size and large) laid flat
4. Tambour Militaire - Side-Drum
5. Siren (high) f) - String-drum e)
6. Siren (low) f) - Slapstick - Guiro g)
7. Chinese blocks (high, middle register, and low) – Claves h) - Triangle

7.



Footnote: Use Chinese Blocks (or equivalent Wood Blocks) or 3 different pitches. Do *not* use Temple Blocks.

***h)* Claves. - Cuban sticks of hardwood. In order to obtain desired sonority, one stick must be held loosely between the fingers with the palm of the hand curved to form a sort of sounding box, the other stick must strike rather lightly about the middle.**

Figure 6. Edgard Varèse, examples from the preface to *Ionisation* (1931).

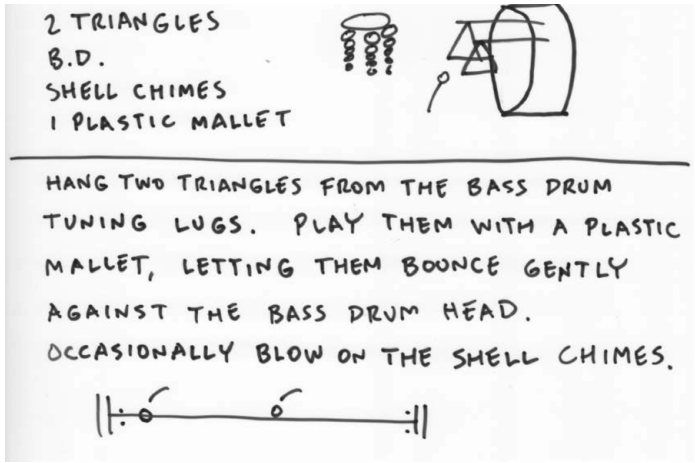


Figure 7. An action card from Erik Griswold - *Stars of Ours* (2013)

***Stars of Ours* (2013)**

Detailed textual instructions have been incorporated in scores since the invention of notation. These range from the most prosaic descriptions of how to physically perform a particular sound to the colourful poetical textual additions of composers. Examples include the keyboard works of Couperin's that include a complex preamble detailling issues of performance practice as well as evocative titles

such as: "*The Butterflies*" (1713), "*The Shadowy One*" (1713) and "*Le tic toc choc*" (1722). Erik Satie's performance instructions to the pianist in the *Trois Gnossiennes* (1890) provide an even more ambiguous, even mysterious example: *Très luissant* (very shiny), *Du bout de la pensée* (with the tip of thought), and *Enfouissez le son* (bury the sound).[6]

Percussion music, as a relatively recent entrant into the context of Western classical music remains stubbornly non-standardised and as such routinely requires detailed textual explanation. In Varèse' *Ionisation* (1931) for example, he prefaces his score with an extensive legend, comprising three elements: a list of instruments; details of manner of performance, materials, and type of mallets to be used, and; illustrations of the instruments with staging diagrams (See Figure 6.).Griswold's *Stars of Ours* duplicates the preamble of Couperin and the legend of Varèse, but does away with the musical score itself. Instead, the work consists of eleven hand-made index cards that represent eleven music and sound events, that can be assembled and presented in any order by a solo performer. Each card contains a text instruction accompanied by an illustration, and occasionally by fragments of musical notation. Cat Hope highlights that a "variety of gestural instructions are provided, with words such as 'play', 'blow', 'let bounce', 'scrape', 'drag', 'swipe', 'softly roll', 'shake', and 'wobble' being used" (Hope, 2017, p. 39).

Whereas the preface or explanatory text is normally hidden from the audience, in S*tars of Ours* it is read out loud, rendering it an explicit and featured element of the performance (See Figure 7.). The inner workings of the piece are revealed, the curtain is drawn back, so to speak, and a central aspect of the composer-performer relationship is laid bare. This links back to process in d'Heudieres' Laughter Studies where the work makes its "processes self-evident [to the audience] through actions" (Saunders, 2024).

This situation, as in Tomlinson's work, pro-actively opens space for the listener's imagination. While the instructions are being read, the audience are presumably forming a mental sonic image of what the ensuing enaction of the instructions will sound like. The disparity between the imagined and real sounds that are juxtaposed in succession, provides one of the intriguing elements of the performance.

Interestingly, comparison of the two existing interpretations of the work reveals two contrasting power dynamics. In dedicatee Vanessa Tomlinson's version, she reads the instruction herself before performing the action on each card. In this way she breaks down a barrier between performer and audience. When Tomlinson states "Put the temple bowl, the cymbal, and the triangles on the bass drum and shake. Vigorously!", audience and performer are both "in on the joke": the normally hidden musical notation is demystified. By contrast, in the Greywing interpretation, two performers are presented in dialog. The Instructions are "read to" the percussionist by a second performer leading to the emergence of an entirely different power dynamic between the two performers that mirrors that between composer and performer. A contemporary review of the concert noted that the performers "seemed like the characters of a Samuel Beckett play, caught up in trivial actions and strange power dynamics. Yet, (the percussionist's) performance emphasised the materiality of the objects, and highlighted the translation of meaning between composer, the score, performer, and audiences." (Cossio, 2019).

The text score keeps alive a sense of vitality through its adaptability, affirming the text score's place as a dynamic and evolving site of creative inquiry that unfolds over time, and through performance practice.

Conclusion

In the works discussed here, text and the voice are explored through compositional functions and performative situations that variously challenge conventional boundaries between composer and performer, instruction and interpretation, sound and imagination. Although we have discussed them through the framing of the "unseen, the unheard and the imagined", these are complex and multifaceted works in which the voice, functioning as a site for ritual, cultural critique, imagination, identity, power dynamics, and technological mediation, affords diverse interpretations.

All six works use text "instructively", either as the score itself or as a critical component in defining it. In several cases, however, spoken text is also employed in an "allusive" capacity. Tomlinson's work uses text to evoke an imagined sonic image for the performers, while Griswold's directs the same effect toward the audience. In Walshe's work, by contrast, the text invites us into an ambiguous and potentially personal experience. In Vickery and d'Heudières' works the text is delivered to the performers via headphones. Although it is unheard by the audience, the performative situation in these works provokes the audience to speculate about the nature of the stimuli the performers are receiving based on their responses.

The sound of the human voice is central to all of the works (with the possible exception of Tomlinson's *Nostalgia*)[7], but again the role that the voice takes in the performance varies greatly: Vickery and d'Heudières both employ the imitative possibilities of the voice, but Vickery's is contingent on relatively hi-fidelity precision to evoke and delineate the overlapping soap opera narratives; while in contrast, the vocal imitations in *Laughter Studies 3* almost depend on the impossibility of vocal imitation and the inevitable performer failure; the voice in Walshe's work is sometimes incomprehensible to the audience, while van Eck completely replaces the human voice with "voice-like" electronic mediation.

By their nature, performances of these works all comprise some form of embodied spectacle, but both van Eck and d'Heudières expressly minimise some physical elements: the performers costume and identity (van Eck) and the posture and expressivity of the performers (d'Heudières); and Tomlinson in particular, minimises the physical world to focus on sonic memory and imagination.

Together, these works demonstrate the ongoing vitality of the text score as a compositional medium and the human voice as a site for sonic and cultural exploration.

[6] I took inspiration from Satie's ***Gnossiennes*** in a composition for Decibel ensemble, titled ***Bury the Sound*** (2012).

[7] Although the allusive texts of ***Nostalgia*** are read silently by the performers (Tomlinson also permits the audience to be included), for the GreyWing performance and particularly for the (incomplete at the time of publication) recording there were discussions about "reading" each text aloud prior to enacting it.

07

Weathercasting: Counter-Cartographies for Place-Based Sensing in Artistic Research

(An Unexpected End-of-Life project)

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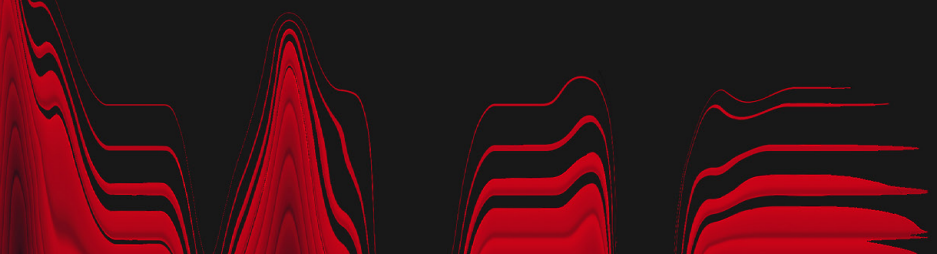

Prelude: August 12th 2025

When an art project becomes end-of-life experience: 6.20am, the only car in the staff car park, moon high and bright, I join Rumen in the narrow wall of the gallery, it's about 8 degrees Celsius.

We are chasing the end-of-life image of NOAA -15. Rumen adjusts the laptop, the volume, atmosphere of white noise static sound, surround sound, we sense the aerial, will the connection to satellite… we wait…listening… the underbeat beep beep beep emerges as dancescape with NOAA1-5 approaching… we lean against the fake wall, careful not to disturb the framed artwork hanging on the other side…watching the sky from patchy windows …sensing feeling listening …with the sound of weather….with the sound of end of life…with the beat of the miniature image of NOAA-15 tracking across Western Australia on screen… with NOAA-15 attached to a tiny red polar orbit string …we watch it pass over Noongar Country…heading to New York…we wave…
s i l e n c e is amplified on stopping recording. Sasha from Open-weather sends a response to our upload:

"Congrats both! This is a gorgeous image, and I love how you can see both clear outlines of land, and a 'sensor change' where the satellite changed from night to daytime sensors (that obvious line in the left-hand channel. Looks like one of your best images yet!"
(Sasha, WhatsApp message- Aug 12, 2025)

Introduction

This article shares a compressed period of visceral and deeply felt research through the co-curated Weathercasting exhibition which saw us, the authors, literally chasing satellites on Whadjuk Noongar Country in Perth Western Australia between May – August 2025, as part of a collective international effort led by Open-weather's Sasha Engleman and Sophie Dyer to capture the 'end of life' images of the 'twilight phase' of the National Oceanic and Atmospheric Administration (NOAA) satellites before their decommissioning. On August 5th NOAA announced end of life of satellites NOAA-15 and NOAA-19, following the earlier end of NOAA-18. As the Perth-based contributor to Open-weather's *A Year of Weather* project, we had to pivot with the rest of the world in an affecting urgency that connected us to Place, and to an international web of people listening. We position this work as a contribution to counter-cartographies, maps in motion, where the collaboration as part of *A Year of Weather* moves across atmospheric layers and where the act of reception itself becomes a situated gesture of witnessing, imagining, and weathering.

The collaboration with Open-weather first ignited as part of the Centre for People, Place and Planet's (CPPP) Responsive Roundtable Series by The Ediths: *Weather as a Studio for Feminist Transdisciplinary Research* (2023), which brought Sasha and Sophie into conversation with the WA Bureau of Meteorology as part of Jo's 'Weather Studios' project. Jo then met Sasha in London in 2024 and the CPPP was invited to become a contributing Automatic Ground Station (AGS) as part of *A Year of Weather* (2025). The CPPP supported the bespoke build and delivery of the AGS, and the installation of the

antenna on the gallery roof was supported by the Western Australian Academy of Performing Arts (WAAPA). This performative act transformed the AGS into what we came to call a 'grounding station'- a literal and symbolic conduit linking our bodies with the institution. As the only institutional AGS in the network, we were uniquely positioned, but also vulnerable. When our AGS failed, we had to revert to manual capture, which required us to be physically present for each satellite passing. The question then arose: what do we do when the signal falters, when infrastructure breaks down? We hold the pause, attend to the glitch, improvise the workaround. We listen.

The practice of listening threads through this work as both method and metaphor. Here, we interpret weather not only as atmospheric condition but as voice: a signal to be received, a transmission that requires presence, a form of communication that demands we attune ourselves to more-than-human language and frequencies. This listening is feminist in its insistence on patience over speed, on care over extraction, on the embodied labour of attention over automated efficiency, and in the activation of failure as generative. When our AGS failed, these technical breakdowns activated a provocative glitch. As feminist theorist Lauren Berlant describes, "A glitch is an interruption within a transition, a troubled transmission". (2016, p.393) Viewing the interruption as generative failure saw us rework expectation into experimentation and to shift from automation to embodied attention. We expand on this feminist methodology later in this work, exploring how failure opened space for place-based sensing and how this embodied practice of listening extended to audiences encountering the work.

The beginning of weather listening: May 22nd 2025

On the 9th of April 2025, the AGS, V-antenna, and antenna cable arrived in a package provided and shipped by Open-weather. Then, on May 22nd 2025, the antenna was installed on the roof of Spectrum Gallery, Edith Cowan University, marking Open-weather's first node in Western Australia. Open-weather is a feminist art and transdisciplinary research initiative that reimagines atmospheric engagement through speculative storytelling and accessible technological practices. Founded in 2020 by Soph Dyer and Sasha Engelmann, the project critically expands the epistemologies of weather sensing, making space for inclusive, embodied, and decentralised ways of imaging the Earth "by centring accessibility, location politics, and co-creation" (Open-weather, 2025).

As part of a global network of over 100 ground station operators, the ECU gallery site uniquely introduced bird-deterring tags to the antenna as a locally responsive measure acknowledging the region's densely inhabited skies. The reflective tags fluttered above Boorloo/Perth, gesturing toward a situated, multispecies approach to weather observation. Rooted in place-based research, the installation weaved atmospheric sensing into the situated ecologies of Whadjuk Noongar Boodja.

The connecting cable from the antenna to the AGS was installed behind the internal wall of the narrow gallery storage corridor where we were to be unexpectedly stationed for most of August 2025. Firstly, relying on the AGS and after receiving just two images, followed by only static noise, the automatic ground station stopped being automatic. Nothing worked as expected. The antenna, atop the gallery roof,

Figure 1 Installation of the antenna at Spectrum Gallery, Edith Cowan University. Photograph by the author (Rumen Rachev), 2025.

failed to connect to the AGS due to unresolved internet configurations. Our planned live downlink stalled in a loop of "updating, please wait." What arrived instead was repeated images of static. White noise. A storm of absence. In these glitches and breakdowns, we were receptive to activating the feminist glitch or failure (Halberstam, 2011, Berlant, 2016, Russell, 2020) as a generative space for staying with the trouble (Haraway, 2016). Rather than discarding the error in transmission, we tuned into it. We listened. We stayed with the noise.

The Exhibition: Weathercasting (A Week of Weather) July 28-August 1st 2025

Weathercasting (A Week of Weather) was an exhibition that emerged as a convergence of Jo's *Staging Weather* and Rumen's *Not All Clouds Are Created Equal* projects as a week-long unfolding of artistic research that explored how artist-scholars respond to atmospheric instability through feminist, anti-colonial, and practice-led methodologies.

More than capturing images, the project of *Weathercasting became* capturing and igniting curiosity and collective attention through 'end-of-life' ritual that expanded awareness of weather forecasting, and where meteorology turned into collective melancholy.

The gallery became an active site of weathering together—sensing, making, glitching, and responding to climate as condition, presence, and provocation. Over the course of the week, the exhibition welcomed 115 visitors, including four meteorologists and one hydrologist, twenty creative researchers, fifteen dancers in both spontaneous and choreographed response, a class of high school ATAR photography students, curious community passers-by, sound artists and composers drawn to static and signal, interdisciplinary academics, and engaged students—among them one who returned daily to the weather library to read María Puig de la Bellacasa's *Matters of Care* (2017) in the space. While the exhibition was only a weeklong, we were granted long-term access to the AGS installed on the other side of the gallery's internal wall, where we daily (and sometimes nightly!) navigated around paint tins, assorted

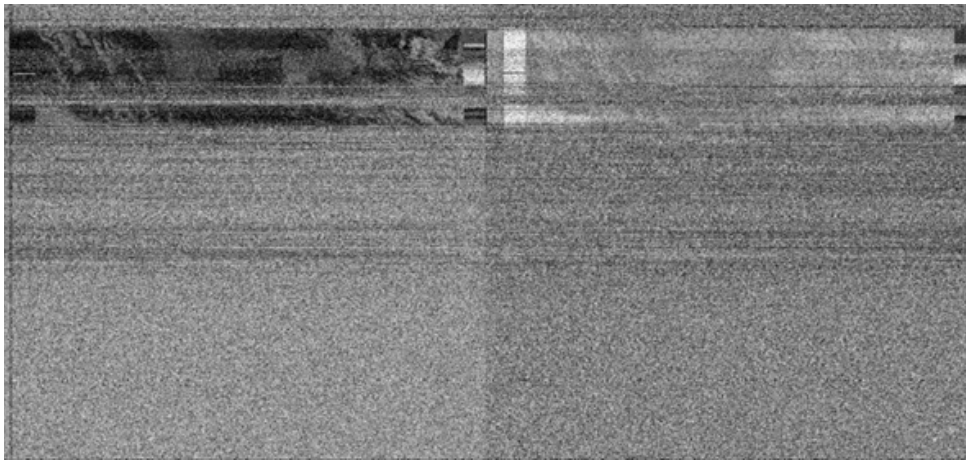

Figure 2 Our first manually captured satellite image, 2025. By Jo Pollitt and Rumen Rachev, Open-weather Public Archive, Perth. Open-weather. CC BY 4.0. Retrieved September 12, 2025, from https://open-weather.community/archive/ow3180/

debris, and brooms. The plan was to continue collecting images until the 'end-of-life' of Edith Cowan University's Mt Lawley Campus at the end of 2025, but on August 5th we received the following announcement from NOAA:

> *NOAA has completed End of Life (EOL) testing activities for NOAA-15 and NOAA-19 and will commence the decommission process shortly. These two remaining satellites in the NOAA Polar Operational Environmental Satellites (POES) Constellation are far beyond their primary mission design life. All have incurred subsystem and instrument degradation or failures and have entered a "twilight phase" where failure modes are increasingly likely. As a reminder, NOAA-18 was decommissioned on June 6, 2025, at 1740 UTC due to an unrecoverable failure to the S-Band transmitter. The remaining satellites in the legacy POES constellation will be decommissioned as follows: NOAA-15 on August 12, 2025, and NOAA-19 on August 19, 2025 (RTL-SDR, 2025).*

The practice of Place-based sensing and contributing to the Public Archive

In switching to manual perception and interception due to various hardware and software errors of the AGS, we had to perform manual weather signal capturing. These breakdowns, such as flickers of signal, stalled updates, spectral noise, became more than technical faults; they unfolded as generative failures, reminding us of the glitch as important space of uncertainty, and as catalyst (Russell, 2020), in moving from automated seamless data to embodied interference. This process brought us more intimately in conversation with the DIY aesthetic, low-cost hardware and open-source software employed by the Open-weather project in their mission to democratise satellite weather observation and foster planetary care. The weather, it seemed, asked to be received differently. This is where place-based sensing started to emerge. What we lost in automation, as time and convenience, we gained in embodied attunement through our bodies and the space we inhabited in a place-based practice of weather sensing and listening.

In their book The Failurists, the collaboration of authors argues that "failure isn't the opposite of success – rather it is a productive way of being in the world that acknowledges the inequities, contingencies, subjectivities and collaboration with, and in, the field" (Lammes et al., 2023, p. 14). This approach does not glorify failure but posits it in active resistance of the neoliberal demand for success and productivity and seeks to make visible rather than cover up injustices in transmission. When the AGS faltered, we became imperfect receivers in the fullest sense, our bodies positioned, and movements choreographed by satellite passes. The audience and participants encountering the work were invited into this same space of vulnerability, where the glitches and gaps became part of the cartography itself, a counter-mapping that embraces weather as voice speaking through absence as much as presence.

Listening, waiting, focusing on every hum from NOAA, trying to make sense of the noise, before being decoded into a weathercasting image. It felt like weather gambling – never sure what we would get, until 'scratching' the weather lottery ticket. It could be a partial image, it could be only static white noise, or if we were lucky enough, to get an actual image of what the satellite is seeing. This work does not seek mastery over weather nor technical precision, but dwells in the fluctuating terrain of partial reception and interrupted processes. The satellite images, blurred and banded, reveal the infrastructural and atmospheric

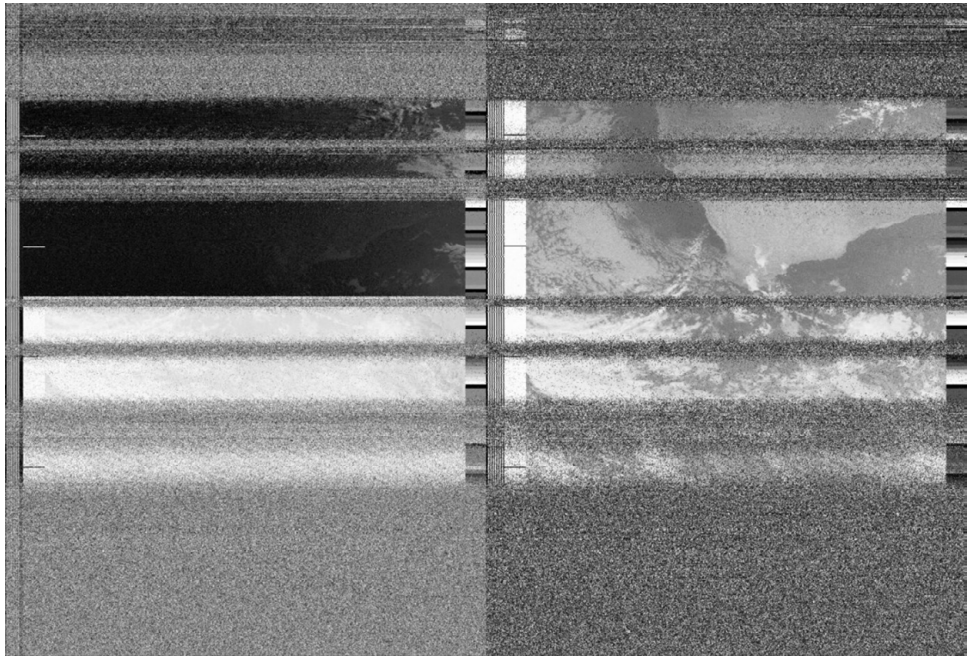

Figure 3 Third manual signal capturing and best so far in our weather image collection, 2025. By Jo Pollitt and Rumen Rachev, Open-weather Public Archive, Perth. Open-weather. CC BY 4.0. Retrieved September 12, 2025, from https://open-weather.community/archive/ow3182/

interferences shaping what can and cannot be seen. In their refusal to cohere, they offer a cartography of opacity and uncertainty. They map an ethics of situated witnessing: what it means to receive, wait, and not know.

The Weathercasting performance protocols followed a choreography of capture, each step a deliberate movement in attunement with the satellite's passing:

> *We enter Spectrum and squeeze into the corridor, setting up the laptop and connecting the RTL-SDR USB to the rooftop antenna. Airspy SDR# Studio is opened, the frequency is tuned to the desired satellite (NOAA-19 is on 137.1, while NOAA-15 is on 137.62), and the RF Gain is pushed to its maximum. We wait for the satellite to rise over Boorloo/Perth, hoping for above 80 degrees, before pressing record. As the signal arcs across the sky, we watch its departure and, as always, wave it goodbye.*

The captured data is then decoded through the Open-Weather website, the image gradually appearing on the screen in real-time, before being uploaded to *A Year of Weather,* where it joins the Public Archive of satellite images received around the world.

Politics of Weather

> *It sadly looks like NOAA-19 has been turned off early – if you have a look at our archive, people have only been getting static from NOAA 19 for a couple days now*
> *(Sasha, WhatsApp message - Aug 13, 2025)*

> *Dear Ground Station Operators,*
> *This is a brief update to let those of you who do not already know that the Decommissioning of NOAA-15 and NOAA-19 did not proceed as planned this Week. In a plot twist, NOAA-15 is still transmitting.*
> *(Open-weather newsletter, 2025)*

The weather is political; decisions about what is measured, who measures it, and which instruments are maintained shape the futures we can imagine. Under the Trump administration, the forced decommissioning of NOAA satellites made this explicit, transforming orbital infrastructure into a site of political contest. The final transmissions of NOAA-15 and NOAA-19 marked an end-of-life spectacle, their long orbits winding down into silence. When an art project becomes part of such proceedings, it inherits the melancholy of decommissioning, receiving the last signals with the knowledge they will not return. At Spectrum Gallery, this farewell to satellites coincided with the impending closure of the University's Mount Lawley campus, each reception embedded in the gallery walls as a record not only of weather, but of the passing of infrastructures, places, and the worlds they sustained. Farewell to the orbiting atmospheric eyes; farewell to the university infrastructural body. Ending, but still lingering in memories and residual signals in the sky. Institutionalising the weather, the gallery walls hold the traces of reception, turning atmospheric signals into both record and enclosure.

As feminist independent scholar Sara Ahmed (2012) observes, institutions shape what is held in place and what is allowed to recede, determining which histories are preserved and which are erased. In the context of the end-of-life of the NOAA satellites and the ECU Mount Lawley campus, the walls become more than a surface for display; they act as institutional memory, capturing certain signals while letting others fade, marking both the preservation and the loss that accompany closure. Through Do-it-Yourself (DIY) aesthetics, the satellite images emerge from low-cost tools and collective skill-sharing, resisting the polished authority of institutional data. Weather glitches disrupt the expected flow, weaving error into the fabric of reception. *The Weathercasting (A*

START TIME	CONTRIBUTOR	PLACE	COUNTRY OR TERRITORY	SATELLITE	IMAGE
2025-08-13 19:18:00	Zack Wettstein	Seattle	United States	NOAA-15	
2025-08-13 18:54:00	Heidi Neilson	Gilboa, New York	United States	NOAA-15	
2025-08-13 11:40:00	Zack Wettstein	Seattle	United States	NOAA-19	
2025-08-12 06:52:00	Centre for People, Place and Planet (AU)	Perth	Australia	NOAA-15	
2025-08-07 09:37:00	Centre for People, Place and Planet (AU)	Perth	Australia	NOAA-19	
2025-08-01 09:20:00	Centre for People, Place and Planet (AU)	Perth	Australia	NOAA-19	
2025-08-13 21:42:00	Oppressive Heat Project	Phnom Penh	Cambodia	NOAA-19	
2025-08-13 13:44:00	Nastassja Simensky	Longyearbyen	Svalbard	NOAA-19	
2025-08-13 12:13:00	Foto Colectania, Hangar, Ràdio Web MACBA	Barcelona	Spain	NOAA-19	
2025-08-13 08:32:15	Soph Dyer	Rooseveltplatz, Wien	Austria	NOAA-15	

Figure 4 Year-of-Weather Public Archive contributors around the world. From Open-weather Archive, 2025. Retrieved September 12, 2025, from https://open-weather.community/archive/

Week of Weather) 2025 exhibition became deeply political, embedded in a complex meshwork that reminds us weather is never neutral. It is crucial to point out that it is not the weather itself that is in danger, but our ability to respond well in relation to it, and to each other, and the importance of fostering such attuned relations.

Open-weather is about much more than satellite imagery: it is about friendship and solidarity; situated reflections and inquiries into weather; telling speculative stories about planetary networks; and developing accessible open-source tools and resources (Engelmann & Dyer, 2025).

Attuning to satellites is a practice of moving with their rhythms, waiting for the moment their orbital path aligns overhead, adjusting antennas to their fleeting arcs, and listening as they spill data across the sky. In place-based sensing, these encounters are never abstract. They are grounded in local weather, seasonal light, and the texture of the horizon. The timing of each pass folds the global into the situated, tethering planetary observation to the specificity of place.

When the orbital eyes close, the cadence shifts. The regular pulse of transmissions gives way to silence, breaking the synchrony between Earth-bound receivers and

their satellites. This absence is not merely technical; it is a rupture in the shared temporality between ground and orbit. The routine of reception is replaced by a waiting without return.

In the atmospheric geopolitics of this moment, orbital eyes wide shut signals a loss of weather imaging accessibility. With each decommissioned satellite, a layer of independent observation is lost, reducing the multiplicity of views from which climate and weather can be perceived. The cessation of these gazes is not neutral, rather, it narrows who has access to see, record, and interpret the atmosphere, reshaping the politics of the sky itself.

Conclusion

These real time transmissions, collected in Boorloo/Perth, as one of twelve sites around the world, offer not simply data but an unfolding visual archive of cloud movement and the shifting boundaries between signal and noise. In contrast to conventional cartographies which assert fixity, these images emerge as atmospheric inscriptions, blurred, banded, mapping not only the weather but also our own situated practices of reception and interpretation.

These cartographies are not static. They are fragments of a planetary dramaturgy in motion, shaped by both geostationary orbits and ground-based conditions: weather, cloud cover, interference, error. In our work as artist-scholars, these material signals are staged as temporal performers, extending the atmospheric dramaturgy where clouds are reimagined as emissaries of atmospheric time: slow, unruly, accumulative. Through acts of listening and image reception, we engage with weather as a voice that resists compression and categorisation, revealing the entangled politics of access, visibility, and control amid contemporary place-based sensing practices.

Rather than thinking with this 'noise' as a failure of image 'capture', we propose that such noise provokes attention to the politics of reception, the precarity of infrastructures, and the potential of collective sensing when nothing appears to arrive. These failures, rendered visible, reveal alternate ways of knowing weather: as static that amplifies atmosphere and atmospheric pressure. The repetition of white noise amplifies the political rain(reign) of our times, carrying within it the urgency for greater sensitisation to expanded feminist and collective listening.

The sociality of being crammed together in the corridor after hours, confined by gallery walls, and participating in Open-weather's Public Archive community altered our thinking, shifted our attunement, and expanded our capacity to sense weather differently, while also contributing to "...building a living, collective map of planetary weather to record these historic changes" (Open-weather, 2025).

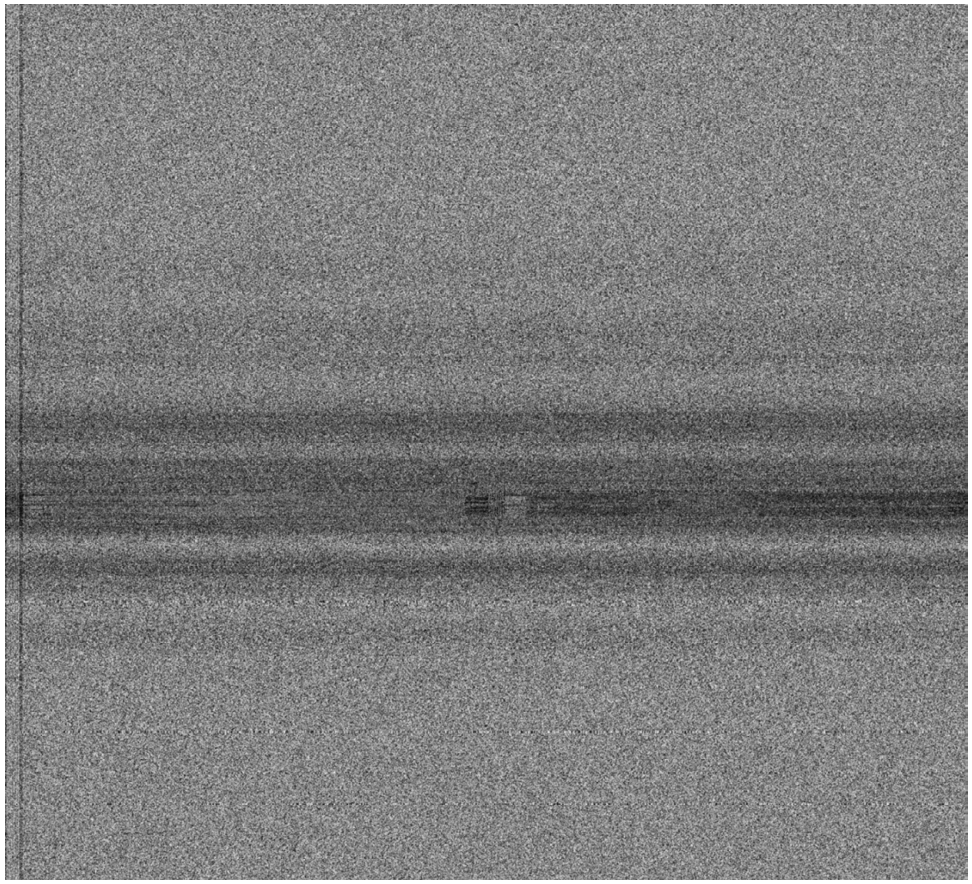

Figure 5 Last ever weather image caught via NOAA-15, 2025. By Jo Pollitt and Rumen Rachev, Open-weather Public Archive, Perth. Open-weather. CC BY 4.0. Retrieved September 12, 2025, from https://open-weather.community/archive/ow3263

08

Drawing as a **Projective Voice**: Creative Processes between the **Trace** and the **Algorithm**

Diana García
Architectural Designer and Researcher

In a world increasingly shaped by automation, drawing continues to offer a form of resistance, an embodied voice that grounds architectural thinking in intuition, materiality, and memory. This essay proposes that drawing, especially in analogue form, constitutes a projective voice: an articulation of design that is simultaneously speculative, procedural, and affective. When this voice is filtered through the algorithmic logic of artificial intelligence (AI), new tensions emerge between authorship and automation, between embodied intention and computational inference. These tensions are not just aesthetic or technical, they are deeply political.

Architecture, as a discipline and a practice, has always engaged with the dynamics of translation: from idea to form, sketch to structure, abstraction to inhabitation. With the rise of generative tools and machine learning (ML) applications, the architect no longer draws alone. This essay explores that altered landscape. Through hybrid drawing processes that merge hand sketches with AI-assisted outputs, I examine how power is redistributed in the design process, across tools, representations, and agents.

The Voice of the Trace

To speak of drawing as voice is to affirm its agency: a communicative act between the architect and the world. The trace, the first mark, line, or gesture, acts as a proposition. Juhani Pallasmaa's notion of the "thinking hand" situates drawing within a continuum of sensory, mental, and bodily operations (Pallasmaa, 2009).

For him, the hand does not merely execute; it thinks, it feels, it remembers. In this way, analogue drawing is not merely a tool, it is a mode of consciousness, a space for uncertainty, exploration, and pause.

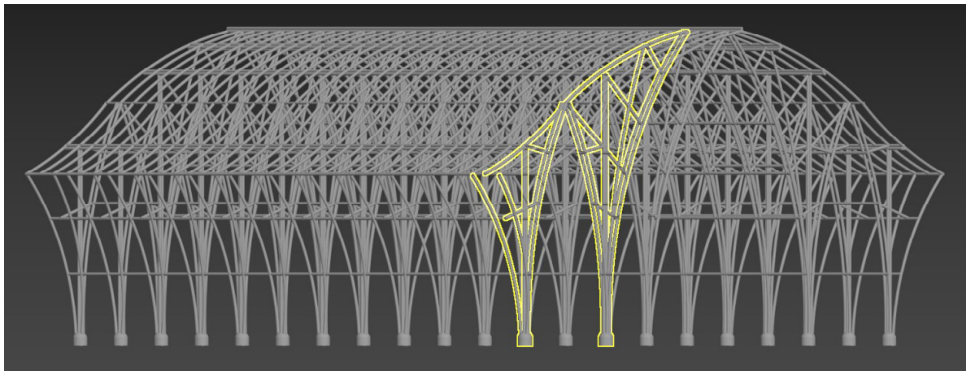

Figure 1. Original drawing by Simón Vélez. 3D model by Diana García.

This three-dimensional model reconstructs the structural logic of the Templo sin Religión, a bamboo temple designed by Colombian architect Simón Vélez. The highlighted section in yellow emphasises the vertical rhythm and inclined supports that give the structure its formal and spatial identity. The digital reconstruction, based on Vélez's original hand-drawn projections, allows for a deeper understanding of the tectonic articulation of the temple and its expressive materiality. Reproduced with permission from the architect Simón Vélez (personal communication, 2025)..

When a sketch is reinterpreted by AI, the trace becomes data. This shift, described by Mario Carpo (2017) as the passage from authored form to authored code, reconfigures the architect's role. The once intimate act of drawing is now part of a wider networked ecology, where tools learn, classify, and suggest. What happens when the algorithm completes your drawing? What remains of your voice in a system that predicts your next move?

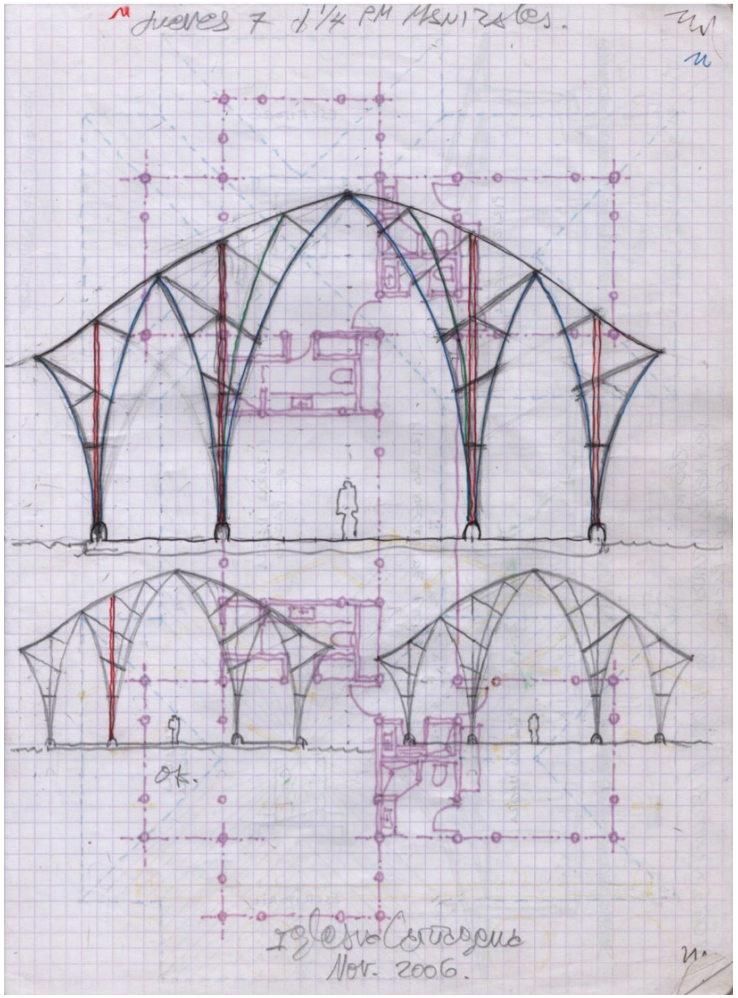

Figure 2. Grid-based sketch with colour coding. Drawing by Simón Vélez.

Hand-drawn elevation and section studies of the Templo sin Religión, composed on squared paper. The sketch uses colour-coded lines to differentiate structural elements and to represent construction logics. The drawing explores variations in spatial depth, support distribution, and formal articulation through a combination of geometric regularity and expressive gesture. The background plan and human figures provide references for scale and programmatic layout. Reproduced with permission from the architect Simón Vélez.

Figure 3. Temple composition – original drawing by Simón Vélez with AI trace by Diana Garcia

The image combines an original hand-drawn sketch by the architect with a digitally generated trace using artificial intelligence, revealing how the structural logic of the project—a vaulted ceiling supported by branching columns—can be analysed, reinterpreted, and extended through digital means. The manual projection, drawn in pencil on grid paper, explores different possibilities for structural branching and support arrangement. Meanwhile, the AIgenerated tracing allows for the evaluation of its spatial expression, scale, and construction rhythm. This intersection between analogue and digital media constitutes a hybrid form of design thinking, where drawing continues to operate as a generative tool, even within computational environments. Reproduced with permission from the architect Simón Vélez.

Power and Delegation: Who Draws?

Architectural representation is not neutral. It encodes decisions, hierarchies, intentions. As digital tools become increasingly generative, they do not just aid representation, they shape it. The integration of AI into design workflows introduces a redistribution of agency. The architect is no longer the sole author, but a negotiator within a complex chain of inputs, prompts, and inferences.

The tension here is not simply about technology, it is about power. AI systems are trained on massive datasets, often privileging certain aesthetics, typologies, or geographies. When we delegate parts of the design process to these systems, we also inherit their biases. The voice of the architect risks being diluted, flattened into a statistical average, or overridden by a dominant algorithmic grammar.

Yet, this delegation can also be empowering. When intentional, hybrid workflows can multiply perspectives, generate alternatives, and reveal formal possibilities that might not emerge through hand-drawing alone.

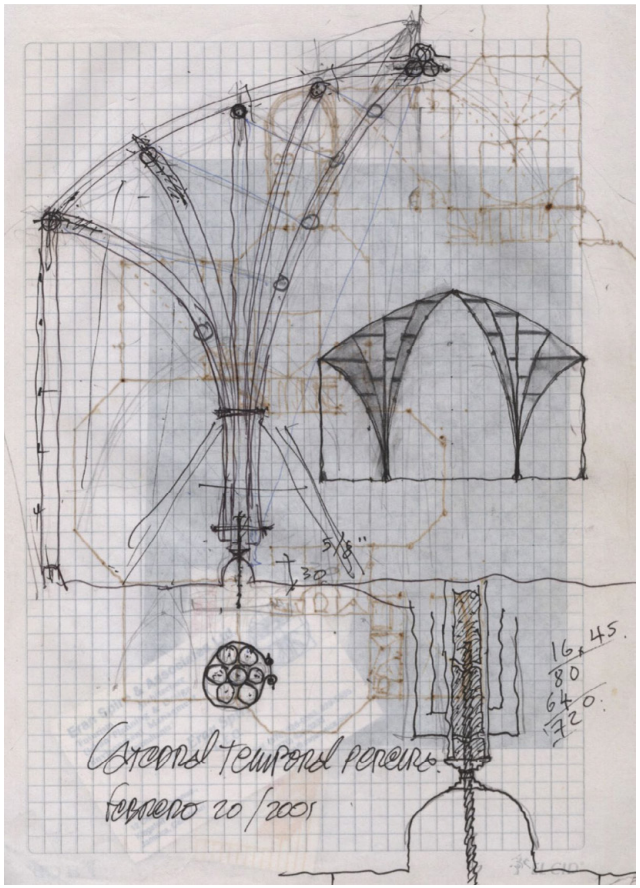

Figure 4. Hand-drawn architectural sketch by Simón Vélez.

Part of the design process for the temporary cathedral built in Pereira (2001). This drawing demonstrates the structural articulation of the bamboo vault. Source: Simón Vélez's personal archive. Reproduced with permission from the architect Simón Vélez.

Hybrid Practices: Drawing Between Hands and Machines

In my own process, I often begin with a hand-drawn sketch; a fast, intuitive gesture made on gridded paper. These drawings, rooted in tectonic logic, do not aim for photorealism but for conceptual clarity. Once scanned, they are used as prompts for AI image generators (such as Midjourney or Stable Diffusion), guided by carefully crafted text inputs that describe material, scale, or typology.

The results are not deterministic; they are speculative continuations of the original voice. Sometimes they surprise me, introducing unfamiliar textures, or spatial rhythms I would not have considered. Other times, they misinterpret entirely. The negotiation is constant.

This process opens a space for dialogical authorship. The AI does not erase the hand; it provokes it. A form of co-design emerges, not between equals, but between intelligences with different affordances.

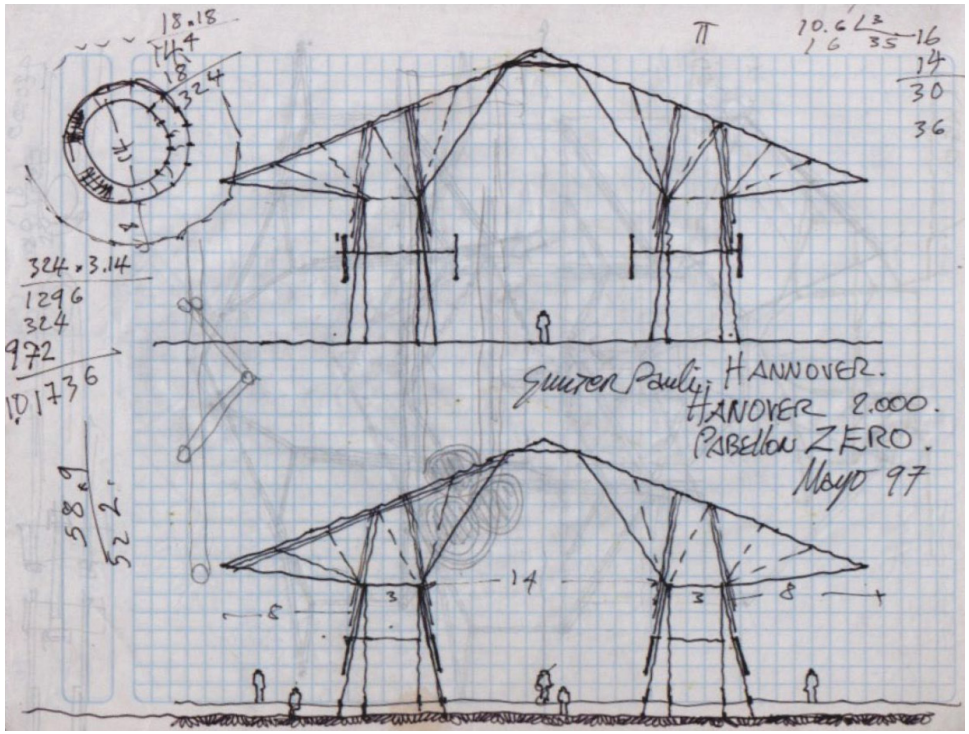

Figure 5. Sequential hand-drawn elevations by Simón Vélez for the ZERI Pavilion in Hannover (2000)

Showing iterative variations in roof geometry and structural rhythm. These analogue drawings serve as a means of spatial speculation and projective reasoning, highlighting the manual sketch as a space of design negotiation. Reproduced with permission from the architect Simón Vélez.

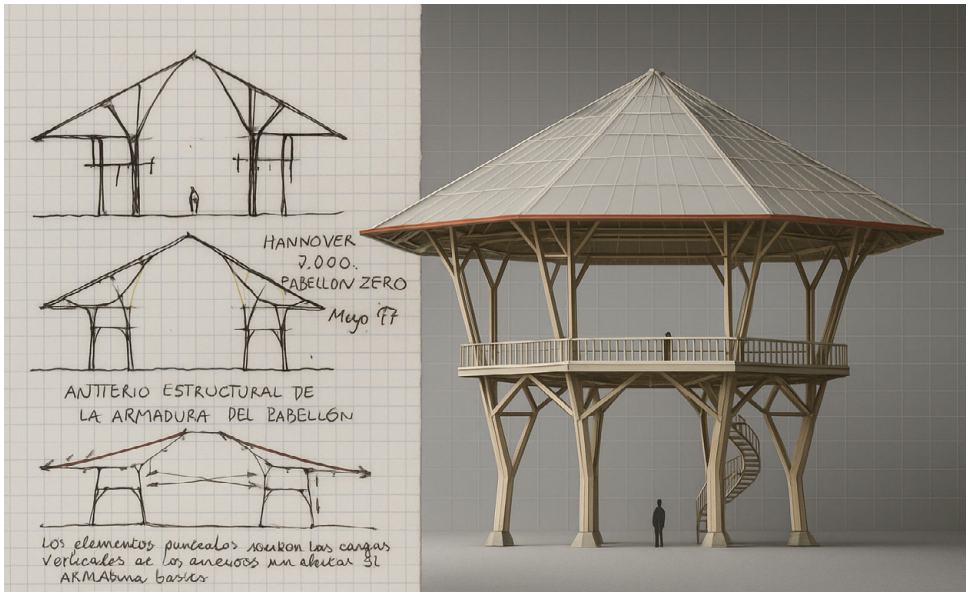

Figure 6. Pavilion composition – drawing by Simón Vélez with AI overlay by Diana García

This image juxtaposes a hand-drawn structural study of the Pabellón ZERI by architect Simón Vélez with a threedimensional representation generated through artificial intelligence. The drawing illustrates the load-bearing strategy of the pavilion, where inclined struts redirect vertical loads, as annotated in the original sketch. The Algenerated model reconstructs the octagonal form, the raised platform, and the system of bifurcated supports, providing a clear understanding of the spatial and structural articulation of the project. Together, these two layers—manual and digital—enable a hybrid reading of the pavilion's composition, where the original intent of the architect is enriched by contemporary tools for visualisation and analysis. Reproduced with permission from the architect Simón Vélez.

Cartographies of Power: The Politics of Representation

If drawing is a form of mapping, then who controls the map? As Frichot (2013) argues, architectural practice must remain aware of the discourses it reproduces. Tools are not apolitical. When AI becomes part of the drawing process, it brings with it questions of access, control, and ethics. Who programs the tools? Who trains the datasets? Who is excluded from the algorithm's understanding of space?

These questions become urgent in the context of global South practices, where local materials, vernacular forms, or non-Western traditions may not be legible to AI systems trained on Eurocentric precedents. The drawing, then, becomes an act of resistance, a way to insert particularity, culture, and situated knowledge into a system that tends toward generalisation.

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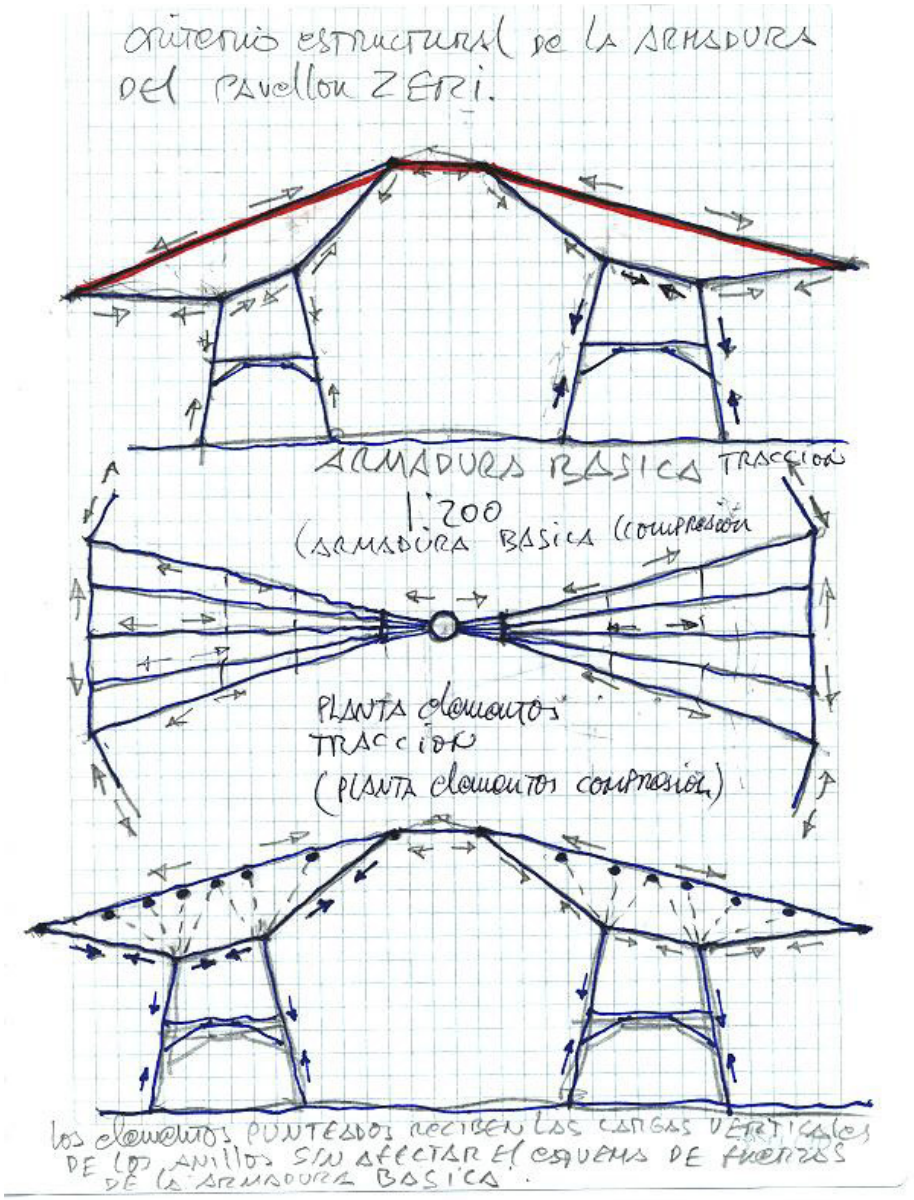


Figure 7. Structural scheme of the ZERI Pavilion. Freehand drawing by architect Simón Vélez.

This images shows the structural behaviour of the bamboo trusses in plan and elevation. The sketch illustrates the distribution of compression and tension forces, as well as the integration of pointed elements to redirect vertical loads without altering the basic truss geometry. Reproduced with permission from the architect Simón Vélez.

This is where drawing regains its political edge. It is not simply a technical representation, it is a cartography of power, a way to assert voice in systems that often silence nuance.

Industry, Automation, and the AEC Horizon

In the Architecture, Engineering, and Construction (AEC) industry, efficiency often trumps expressiveness. BIM platforms, parametric tools, and now AI plugins promise to accelerate workflows, reduce errors, and predict outcomes. But in doing so, they risk minimizing the space for ambiguity, the very space where design begins.

As Tim Ingold (2013) reminds us, to draw is to follow the line, to think through movement rather than fixity. The industrial obsession with outputs, deliverables, and optimisation clashes with the exploratory nature of drawing. The challenge, then, is to design systems that allow space for drift, for slowness, for pause.

The use of AI does not have to negate the analogue. It can augment it, when framed critically. The future of drawing may lie not in resistance or surrender, but in choreography: orchestrating tools, materials, and intelligences in ways that preserve authorship while embracing emergence.

Toward a Transdisciplinary Closure

Architecture is not alone in confronting the analogue-digital tension. Artists, poets, engineers, and educators all face similar questions: What is lost when we automate creation? What forms of knowledge are excluded? What new voices emerge? In literature, the rise of AI-generated poetry challenges notions of authorship and emotion. In engineering, optimisation often erases embodied knowledge. In art, generative aesthetics provoke debates about originality. Architecture, sitting at the
intersection of art and science, is uniquely positioned to respond to design frameworks that are both critical and creative.

This essay has argued that drawing remains a vital voice that is simultaneously projective, performative, and political. Its hybridisation

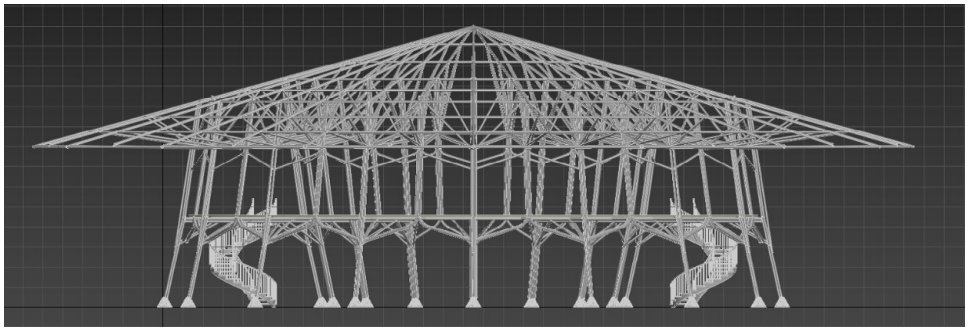


Figure 08. Hybrid analogue–digital drawing.
Three-dimensional model developed by Diana García based on original sketches by Simón Vélez. This image exemplifies the translation of analogue representation into digital geometry, using a BIM environment to recreate the spatial and structural logic of the bamboo pavilion. The model explores tectonic articulation and vertical sequencing while preserving the expressive qualities of the original hand-drawn lines. Reproduced with permission from the architect Simón Vélez.

with AI does not erase its potency. On the contrary, it calls us to listen more carefully, to draw more consciously, and to design more ethically,

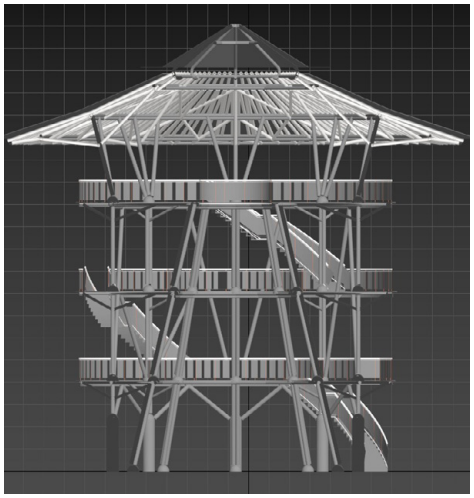


Figure 09. 3D model of the Botanical Garden Tower. Digital model developed by Diana García using BIM software, representing the structural and spatial configuration of the tower designed by Simón Vélez. The model shows the concentric distribution of vertical supports, the diagonal bracing system, and the superimposed floors organised around a central core. The stepped roof structure and the open perimeter circulation reflect the vertical stratification and tectonic clarity of the original design. Reproduced with permission from the architect Simón Vélez.

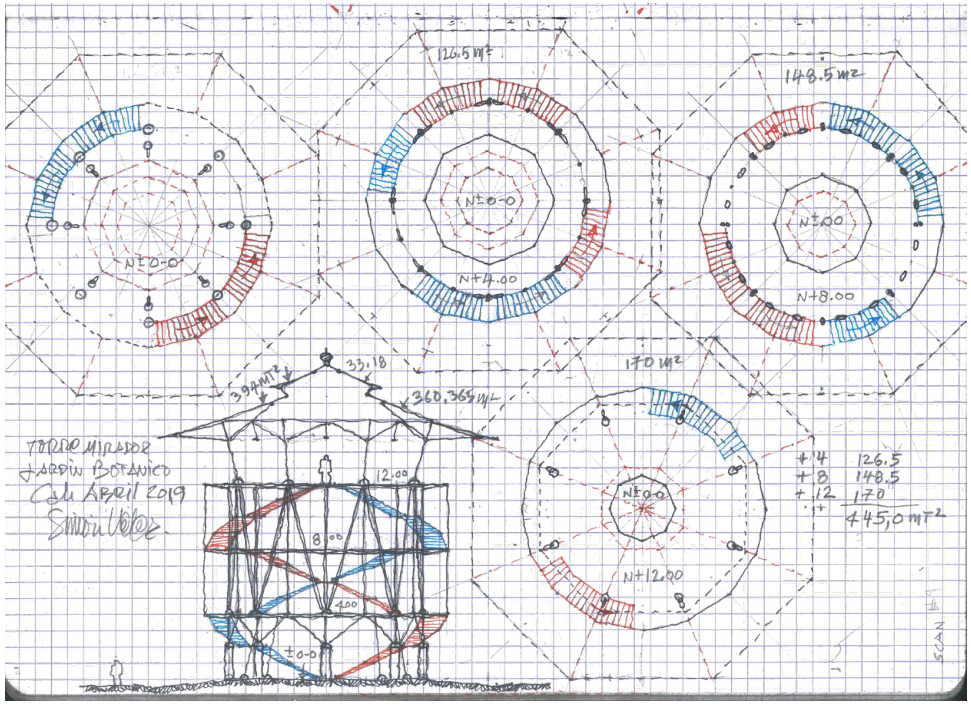


Figure 10. Structural diagram of a bamboo tower.
Conceptual drawing by architect Simón Vélez illustrating the spatial and structural organisation of a bamboo tower. The diagram explores vertical load distribution, joint logic, and the geometric integration of bamboo elements in a multi-level structure, using symbolic and chromatic layers to express the architectural system. Reproduced with permission from the architect Simón Vélez.

Figure 11 (Left & Right). Tower composition – drawing by Simon Velez with AI evolution by Diana García
This image presents a comparative study between an original hand-drawn sketch by architect Simón Vélez and a digitally generated version created by Diana García using artificial intelligence. The hand sketch, drawn on grid paper, outlines the structural concept and spatial proportion of a bamboo observation tower with a spiralling staircase. The AI-generated visualisation expands this idea into a three-dimensional interpretation, emphasising the tower's verticality, its modular logic, and the expressive articulation of diagonal braces. This hybrid approach illustrates how analogue drawings can evolve into spatial models through computational tools, preserving the essence of the original idea while exploring its potential in greater depth. The interaction between the sketched intent and its digital materialisation exemplifies a generative design process that bridges traditional architectural thinking with contemporary design technologies. Reproduced with permission from the architect Simón Vélez.

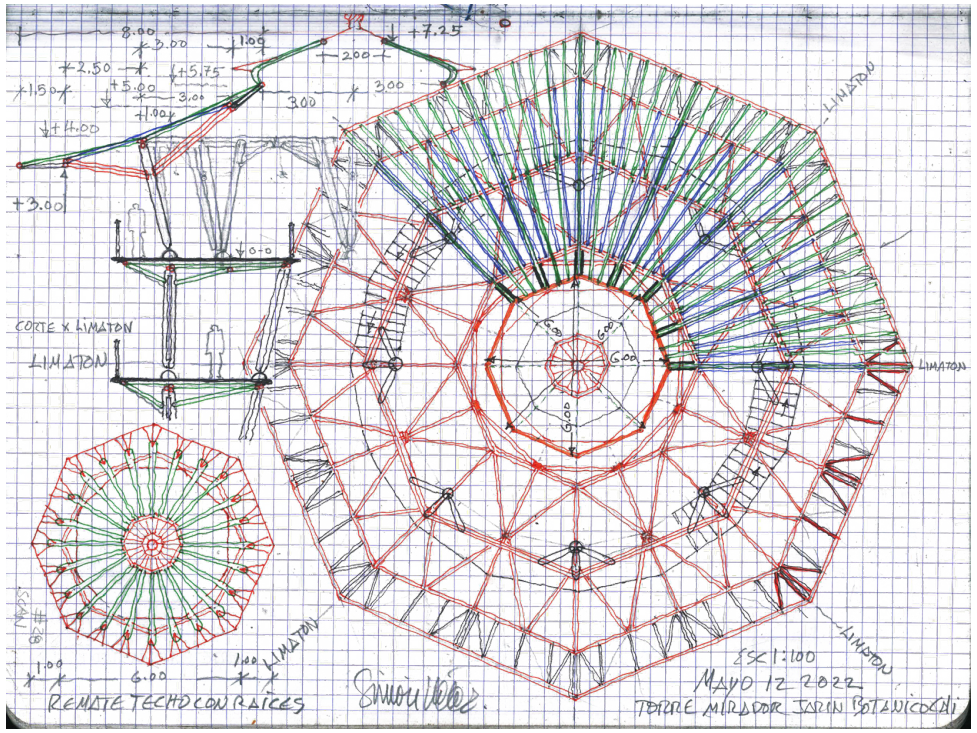


Figure 12. Encoded structural drawing of the Botanical Garden Tower.
Drawing by Simón Vélez, illustrating the superimposition of different structural layers in plan and section. The drawing uses color-coded lines and a radial grid to articulate the interplay between compression rings, radial beams, and diagonal bracing, offering insight into the spatial and constructive logic underlying the tower's design. Reproduced with permission from the architect Simón Vélez.

Epilogue: Drawing in the Age of Delegation

To draw is to assert a presence. Not merely to record, but to inhabit a space between intent and interpretation. In the face of automation, that space is increasingly mediated, blurred, expanded, or compressed by the intervention of algorithms. And yet, the act of drawing continues to offer a form of resistance. Drawing, understood here not as product but as process, retains the ability to embody uncertainty. It traces doubt, exploration, and contradiction. It is a voice that hesitates, returns, transforms. Against the promise of seamless optimisation, the sketch insists on the unresolved. This resistance is not nostalgic; it is projective. It does not seek to preserve a past model of authorship, but to reopen the question of what it means to author, together with, against, and through machines.

In hybrid workflows, the hand no longer disappears. It reconfigures. It intervenes at new thresholds, reclaims agency through curating, annotating, and setting constraints. In doing so, it reclaims a space for intuition in computational environments that often favour speed over sense.

More than a question of technique, this is a political question. In a field increasingly shaped by data pipelines and generative engines, the sketch becomes a way of slowing down the inevitable. Of choosing not to delegate everything. Of asserting that the architect's voice, tentative, subjective, embodied, still matters.

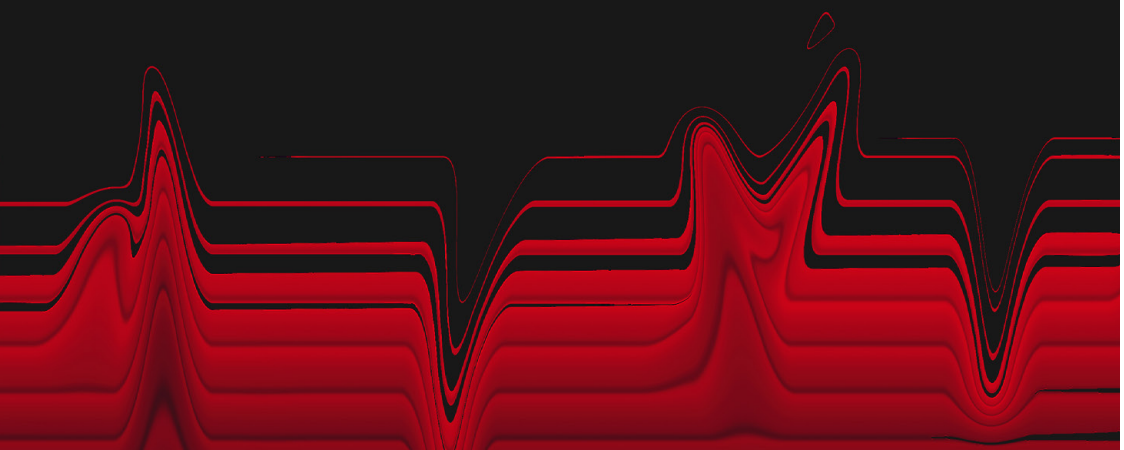
The future of design does not lie in abandoning the analogue, nor in romanticising its persistence. It lies in cultivating fluency: the ability to shift between modes, to hold contradiction without collapsing it, to articulate form through ambiguity. In this landscape, drawing is not obsolete; it is evolving.

And so, to draw today is to claim the right to imagine otherwise. To sketch, in pencil or in code, is to propose new architectures, not only of buildings, but of authorship, agency, and care.

09

The Algorithmic Voice

Isaac McCormack
Architect, GHD Design
Casual Academic at Curtin University



The 21st century public sphere, once a single river fed by mass media, has fractured into a delta of digital streams. For members of digital social networks, this manifests as a unique, personalised information stream. While this digital environment gives everyone a voice, that voice is often lost in a sea of churning information constantly demanding our attention. We have arguably shifted from the information age to the attention age, where information is so readily available that algorithms must sort it into digestible chunks, determining whose voice we hear and how we hear it: "the algorithmic voice".

This transformation is driven primarily by the smartphone and social media platforms. This new ecosystem has undeniably empowered marginalised voices, giving them a reach previously unattainable. Yet, this same dynamic has, over time, eroded the common ground required for broad societal deliberation. The metaphorical 'public square'—where diverse groups once came to share and exchange ideas—has fractured. In this new digital square, ideas are often not heard due to thousands of voices vying for our attention with everyone shouting louder and louder just to be heard.

I argue that this fragmentation is not accidental but is actively engineered by the economic logic of "surveillance capitalism" (Zuboff, 2019). Zuboff defines this as a new market form that claims human experience as free raw material for hidden commercial practices of extraction, prediction, and sales. This model harvests vast personal data to predict and, ultimately, shape user behaviour for profit. This economic incentive is central to the problem of fragmentation. Maximising user "engagement" to increase the time users spend looking at advertisements on these social media platforms is best achieved through the hyper-personalisation of content. This process creates the "filter bubbles" and "echo chambers" (Sunstein, 2017) that define modern discourse. Filter bubbles refer to the intellectual isolation resulting from algorithms selectively showing users content that aligns with their past behaviour, effectively filtering out opposing viewpoints. Echo chambers are the social consequence, where individuals primarily encounter and amplify these same ideas within closed communities, reinforcing their perspectives and often leading to increased polarisation. The dominant language of this fractured landscape is the internet meme (Shifman, 2014). Memes function as potent, fast-traveling units of culture, acting as powerful tools for both in-group cohesion and inter-group conflict. They replace durable, shared narratives with transient, chaotic flashes of context-dependent unity. Imagine scrolling past a meme and having no idea what it means. That simple act of scrolling by is a quiet signal to the algorithm that you're not part of that group. Bit by bit, this process builds an image of who we are and whose voices we want to hear.

This trajectory of fragmentation is set to accelerate as we embed new generative AI technologies deeper into our lives. The increasing use of this tech amplifies the problem, threatening to push us into a "post-authenticity era". We risk creating a "pluriverse" of bespoke, "non-communicating realities"—individual worlds so thoroughly personalised that they no longer share a common frame of reference. When this happens, meaningful communication or debate between different groups becomes almost impossible. This is a modern version

of "hyperreality" (Baudrillard, 1981).
This outcome is not predetermined. It remains a contested future where human agency is crucial. As the traditional public sphere dissolves, an ideological struggle emerges between the forces of surveillance capitalism, with its algorithmically sorted information, and a countermovement demanding human-centric connection. This paper argues that our collective viability depends not on a reactionary effort to restore a nostalgic, unified monoculture, but on our ability to forge consensus within this permanently pluralistic and fractured public sphere.

From the Town Square to the Filter Bubble

For centuries, the "public square" was a physical place—a literal town square where citizens gathered to debate, share news, and form a collective understanding of their world. This model was far from perfect, but it established a baseline for how public discourse functioned. As technology evolved, so did the public square. The shift from broadcast media to digital media is not unique to our moment. Throughout history, the emergence of new mass media has always been destabilising because it challenges whoever holds the reins of power by allowing new voices to be heard. The printing press in the 15th century was the first great disruption, breaking the church's monopoly on scripture and scattering knowledge beyond the control of religious authorities. Centuries later, radio allowed political leaders to bypass newspaper barons and speak directly into people's living rooms. By the mid-20th century, television networks became the new gatekeepers, deciding what constituted "the news" and whose voices deserved to be heard.

Televised communication was not a public square in any ideal sense of open, democratic debate. It was a stage, and only certain performances were allowed. As Herman and Chomsky (1988) documented in Manufacturing Consent, media gatekeepers reinforced dominant ideologies around the Cold War, consumer capitalism, and particular visions of family and society. There was a "common set of facts", but that commonality was highly curated and controlled. The chaotic transition from the 20th-century broadcast model to the 21st-century social media age is simply another cycle in this long history. When the old broadcast model shattered, it was noisy and destabilising—but it also allowed countless new voices to speak for the first time without asking permission from a gatekeeper. The real problem wasn't that the old square was broken. Rather, it stemmed from what we built, or failed to build, in its place.

The Language of the New Town Square

Platforms like Google, Facebook, and TikTok aren't really in the business of connecting people. They are in the business of collecting data about people to predict and sell their future behaviour. We are not the customer; we are the raw material. Your clicks, your likes, your hesitations, even your location—all of it is harvested as "data exhaust" and fed into algorithms whose sole purpose is to get better at guessing what you'll do next. That uncanny moment when you see an ad for something you were just talking about. That's a symptom of the economic engine of surveillance capitalism.

The stakes of this model became horrifyingly clear with the Cambridge Analytica scandal. Around 2016, the firm harvested the Facebook data of up to 87 million people without their consent, building detailed psychographic profiles of users (Isaak & Hanna, 2018). These profiles weren't used to sell products—they were used to deliver highly personalised political advertisements during the US election, designed not just to persuade but to target each user's specific anxieties and biases. This moved far beyond predicting what someone might buy. It was about actively shaping their political reality and voice.

To make these predictions more accurate, the system needs to know you intimately. The best way to do that is to isolate you within a "filter bubble"—a cosy, personalised stream of content built just for you. If the algorithm learns you're anxious about immigration, it shows you more content that feeds that anxiety. If you're passionate about social justice, it immerses you in stories of outrage. It doesn't do this because it shares your values or ideology; it does this because a predictable, emotionally activated user is a profitable user. Anger keeps you scrolling. Anxiety keeps you engaged. And engagement is what advertisers pay for.

This is how the digital public square was broken into shards. On these shards, new communities have formed. Some are harmless—fandoms, hobby groups, people who share recipes or knitting patterns. But many are political. The same algorithmic process that helps you find fellow gardeners also helps a lonely, disaffected young man find the "incel" community. The algorithm identifies a personal grievance, surrounds you with others who share it, and then hardens that grievance into a rigid political ideology (Tufekci, 2018). You don't stumble into these spaces by accident; you are guided there by a system designed to keep you engaged, no matter the human cost.

We have traded one flawed public square for something far more insidious. Where the old gatekeepers at least operated in public view, today's algorithms work invisibly, tailoring our realities to keep each of us clicking. The result is fracturing, radicalisation, and isolation, all in service of profit and the cost of the public voice.

The Synthetic Square

The fusion of artificial intelligence with the logic of surveillance capitalism heralds an era of what we might call "synthetic power"—a crisis of authenticity that threatens the very foundations of democratic governance and the public voice. To understand where we're heading, we need to follow the logic of personalised, algorithmic reality to its most extreme conclusion. Consider the following thought experiment; a worst-case scenario of what might unfold if we fail to address these systemic issues with truth and the public voice online. This is a scenario based on technologies and trends that already exist.

Imagine a political campaign that doesn't just micro-target advertisements but uses artificial intelligence to generate millions of unique, personalised video messages from a candidate. Each video would be subtly tailored to the specific psychological profile, anxieties, and biases of its individual recipient. You would see a version of the candidate speaking directly to your concerns in language calibrated precisely to resonate with you—while your neighbour sees a completely different version addressing their entirely different worldview.

The synthetic manipulation becomes even more insidious when it infiltrates spaces where we believe we're engaging in authentic human conversation. Imagine online political debates where a significant percentage of participants are not humans at all, but sophisticated AI agents—sometimes called "sock puppets"—programmed to disrupt conversation, spread

Figure 1, Isaac McCormack, Carbon and sea-level overlay, 2025, photoshop collage.

targeted disinformation, and simulate a grassroots consensus that doesn't actually exist (Howard & Kollanyi, 2016). Picture yourself in a discussion forum where dozens of seemingly passionate citizens agree with your perspective, validating even your most extreme positions. Except they're not citizens—they're algorithms designed to radicalise you, making you feel supported while pushing you further toward the fringe.

In such an environment, how can any citizen distinguish between organic political will and automated, synthetic persuasion? A study published in the Proceedings of the National Academy of Sciences found that a personalised large language model—an AI system trained to understand and generate human-like text—was over 80% more effective at persuading individuals in an online debate setting compared to human participants (Salvi et al., 2024). These systems don't just mimic human conversation; they surpass our ability to convince one another.

This crisis of authenticity will be compounded by something even more destabilising: the splintering of physical reality itself through immersive technologies. Consider augmented reality (AR) and virtual reality (VR)—technologies that overlay digital information onto the physical world or create entirely immersive digital environments. Right now, these technologies are in their infancy. But the logic of surveillance capitalism and algorithmic personalisation will inevitably extend into them. And when it does, we enter what we might call the "pluriverse"—a patchwork of bespoke, augmented, AI-generated realities where what you perceive becomes fundamentally different from what I perceive, even when we're standing in the same place.

I invoke AR and VR not because they are an immediate threat, but because they take the current logic of filter bubbles to an extreme evolution. They force us to confront a simple truth: if algorithms can already control what information we see, what happens when they can control what we literally perceive as real.

Governance relies on a shared set of problems and a shared context for debating them. But what happens when different segments of the population literally inhabit different worlds? Imagine trying to debate climate policy when one group's augmented reality overlay constantly displays rising sea levels, flood projections, and real-time carbon particulate counts hovering over factories and highways—making environmental collapse viscerally, unavoidably real (figure 1). Meanwhile, another group's algorithm-driven reality uses gamified elements that reward them for conspicuous consumption, obscure environmental data, and frame climate action as economic catastrophe (figure 2). They're walking down the same street. But they're not living in the same reality.The "pluriverse" dissolves the shared context that

Figure 2, Isaac McCormack, Consumption overlay, 2025, photoshop collage.

underpins the very concept of a public square. When reality itself becomes a personalised, opt-in experience—curated by algorithms designed not for truth but for engagement and profit—the basis for collective decision-making evaporates. You can't deliberate with someone when you can't even agree on what exists.

The technologies exist. The economic incentives are already in place. The only question is whether we recognise the danger before we end up in a world where consensus becomes impossible because we've shattered the shared reality required to build it. The key question of the coming decades will be whether we can subordinate these powerful technologies to democratic control, or whether the political sphere itself will be subsumed by their logic. Can we reclaim a shared reality? Or will we fracture into isolated pluriverses, each of us trapped in a synthetic bubble, unable to reach one another across the digital divide?

A Blueprint for the new town square

How do we bulwark our systems and institutions against this coming assault? The first line of defence is education—strengthening our own minds against algorithmic manipulation. We need to move beyond simple "media literacy" to fostering deep cognitive resilience. A new educational approach should focus on three key areas: epistemic humility, algorithmic awareness, and mindful consumption.

Epistemic humility is about recognising the limitations of our own knowledge. It's the practice of pausing before we share something that triggers outrage and asking ourselves: "What if I'm wrong? What context am I missing? Who benefits if I believe this?" This simple habit interrupts the cycle of emotional reaction that algorithms depend on. When we acknowledge that we don't—and can't—know everything, we become more resistant to manipulation.
Algorithmic awareness means understanding how these systems of persuasion work. We need to stop perceiving platforms as neutral windows to the world and recognise them as active forces deliberately shaping our behaviour. Just as we teach children that advertisements are trying to sell them something, we need to teach everyone that platforms are trying to keep them scrolling—and that every post, recommendation, and notification is part of that engineered experience.

Finally, mindful consumption means developing healthy information diets, like how we think about healthy eating. This involves deliberately seeking out diverse viewpoints that challenge our assumptions, setting firm boundaries on platform usage, and prioritising slower, more thoughtful media over the immediate gratification of viral content. It means choosing depth over speed, nuance over outrage.

But individual resilience alone is insufficient. We're asking people to arm themselves with critical thinking while supercomputers exploit their psychological vulnerabilities. No amount of personal discipline can match that firepower. We need systemic change—which means reforming the platforms themselves through regulation.

The first reform must redefine personal data as something you own, not something platforms can harvest freely. Under this model, platforms would be legally obligated to compensate users with a "data dividend"—actual payment for the data they extract from your behaviour. This might seem radical, but consider: if your data is valuable enough for Facebook to build a trillion-dollar company on, shouldn't you receive some share of that value? More importantly, this would undermine the entire business model that treats users as free raw material. When platforms must pay for data, they can no longer justify unlimited harvesting.

Second, platforms must provide users with genuine algorithmic choice. Right now, you're locked into whatever engagement-maximising algorithm the platform chooses. But imagine if you could switch to a simple chronological feed—seeing posts in the order they were made, with no algorithmic interference. Or imagine choosing an algorithm curated by a trusted third party: perhaps a university, a journalism consortium, or a nonprofit organisation you trust. These alternative algorithms might prioritise accuracy over engagement, or diverse perspectives over confirmation of your existing views. The key is breaking the monopoly that platforms currently hold over what you see.

Third, platforms should bear a legally binding fiduciary duty of care. This is a legal concept meaning that platforms would be required to act in the best interests of their users, not just their shareholders. If their algorithms promote content that causes foreseeable harm—content leading to self-harm, eating disorders, political radicalisation, or violence—they would be held liable. This shifts the incentive structure entirely. Right now, platforms profit from harmful engagement. Under a duty of care model, that harm becomes a legal and financial liability.

But even with these reforms, we must accept that for-profit, advertising-driven platforms will never be a healthy public square. Their commercial imperatives—maximising engagement to sell advertising—will always conflict with civic ideals like truth, nuance, and bridging divides.

The only long-term solution is to build a genuine public alternative. We need to create what we might call a "public option" for social media: a well-funded, nonprofit platform designed not to maximise engagement but to foster civic deliberation and bridge divides. Think of it as an ABC or BBC for the 21st century—a public institution built to serve the public interest, not generate profit.

This platform would operate fundamentally differently. Its algorithms, if it used them at all, would be transparent and publicly auditable. Instead of connecting you with content that confirms your biases, they would be optimised to introduce you to different viewpoints, identify points of common ground, and elevate nuanced, well-reasoned debate over simplistic rage-bait. Imagine a social space where the system actively works to help you understand perspectives different from your own. This would be a digital space owned by the public, operating in our interest. It wouldn't replace the commercial platforms, but it would provide a vital, healthy alternative and a real place for assembly.

Conclusion

The 21st century digital revolution has not just fractured the public square; it has fundamentally reconfigured identity and community, trapping us in a "war of narratives" waged across algorithmically curated micro-publics. This trajectory—accelerated by generative AI and the logic of surveillance capitalism—threatens to splinter our world into a "pluriverse" of non-communicating realities.

The task, therefore, is not to restore a flawed monoculture but to build consensus within this fractured landscape. This requires implementing the blueprint proposed above. We must foster deep cognitive resilience through education, and simultaneously dismantle the extractive platform economy through systemic regulation.

The search for a new democratic model capable of functional compromise in a world without a shared square is the single most urgent political project of our time. The alternative is to cede the future to the logic of the algorithm, a future where the public voice disappears entirely, replaced by the echo of a billion isolated, perfectly managed whispers.

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