

^[1] Michel Serres, 2011
Variations on the body
Univocal, Minneapolis

^[2] Sadie Plant, 1998
Zeros and ones: digital women and the new technoculture
Fourth Estate, London

^[3] Hito Steyerl, 2017
'Bubble Vision' at *GUEST, GHOST, HOST: MACHINE!*
Serpentine Galleries, London

^[4] Karen Gregory, 2016
'In the Cards' in *Object-oriented feminism*
University of Minnesota Press, Minneapolis

^[5] Gilles Deleuze & Felix Guattari, 1987
A Thousand Plateaus: Capitalism and Schizophrenia
University of Minnesota Press, Minneapolis

^[6] Brian Massumi, 2002
Parables for the Virtual
University of Minnesota Press, Minneapolis

^[7] Anna Lowenhaupt Tsing, 2015
The mushroom at the end of the world
Princeton University Press, Princeton

^[8] Levi R Bryant, 2011
The democracy of objects
Open Humanities Press, Ann Arbor.

Writing in response to the exhibition

Martina O'Brien
At Some Distance in the Direction Indicated

March 10 – April 29, 2018
Butler Gallery, Kilkenny, Ireland

Our bodies are barometers. The inner ear, the joints, the cavities of the chest: our primeval caverns and fleshy crevices are attuned to variations of atmospheric pressure. Even if we have forgotten the signs, the symptoms still make themselves known in the recurrence of arthritis, sinusitis, asthma and migraines. We have always known when the storms are coming.

Yet we built ourselves a prosthetic sensor, an authority more reliable than the body. Invented in the seventeenth century, barometers came of age in a modern era that heralded new standards of accuracy and precision in astronomy, meteorology and horology. Processed by the cabinet constructions of clock and barometer, time and weather – the word is the same in Latin languages (*temps*, *tiempo*, *tempo*) – became increasingly ordered, managed and predictable.

In my memory, it is a perfectly turned circle of polished hardwood, richly grained, and precisely inlaid with brass surround and a grave disc of glass. Behind, a quiver of a silver needle, poised to commit. Snug out of sight, sits a fluid-free gauge: a breathing alloy capsule that expands and contracts in response to its atmospheric environment. Its operation requires a swift tap of fingernails on glass, and close attention to the jerk of the needle, as it snaps to attention. The weight of the air is given expression in five classifications, etched at strict intervals into the face of the instrument: Stormy, Rain, Change, Fair, Very Dry.

We lived in the wettest, boggiest part of the country. When the fog lifted and the sky lightened, I'd never dare tap, for fear of inviting 'Change', and a return to soggy normality, wet socks and foot rot in the sheep. But I remember other, stranger times, when the water tank dwindled low and stewed with sediment, peat whipped dry by the wind and tadpoles wriggling in shrinking shallows. Then I would rap insistently, demanding the barometer bring us Rain.

With covert confidence, I believed that we had got it the wrong way round. The barometer did not predict nor demonstrate the weight of circulating air, but our brusque interference – a literal knocking on heaven's door – produced the subsequent changes in the weather. Every act of measurement was a violence, a cleaving of climatic conditions. This was no illusion of control, of human mastery over the elements, or a claim for anthropocentric sovereignty. A tap for Rain might result in Very Dry. The sky remained unruly, the instrument unpredictable.

Philosopher Michel Serres has described the barometer as a 'whimsical' dancer, irrational and creative in comparison to its austere cousin, the clock. They "*express in duet that the world is formed from order and disorder*".^[1] Disguised as scientific measurement, the barometer tempts something more like animism or a kind of magic: a rain dance of fingertips upon the surface of the machine. Such are the contradictions at play in the work of the artist Martina O'Brien.

She emerges like an apparition, lit by the spectral blue of the screen. Working alone in the dark, amid the electronic hum of whirring disk drives, she makes small but exacting edits to a sequence of moving images. Later, she spreads tarot cards by candlelight. The hour is late and she is weary, but reading the cards is equally an art of precision and pattern. My first encounters with Martina O'Brien revealed something of the nature of her artistic practice: it is tenacious, meticulous and speculative.

At first glance, her work appears to embrace the detached and methodical aesthetic of machinic abstraction. *Peripheries* (2017), the outcome of a residency in The Irish Centre for High End Computing, mines the grids, datasets, and simulated imagery of high-resolution climate modelling. But the human body continually resurfaces: in the swell of Gregorian chanting infiltrating the ecclesiastical home of MareNostrum, Spain's largest supercomputer, in *Loop Topology* (2018); and in the hand-stitching that runs askew in *52 Years from Monday* (2017), a series of 46 drawings modelling weather events predicted to affect Ireland between 2070 and 2099.

Needlework and weaving – the traditionally-female arts of calculation – are recognised by Sadie Plant as precursors of computation. Furthermore, these are seductive processes: "*There is an obsessive, addictive quality to the spinning of yarn and the weaving of cloth; a temptation to get fixated and locked in to processes which run away with themselves and those drawn into them*".^[2] The danger of machinic immersion is what Hito Steyerl has called 'bubble vision', in which the human becomes a blind spot in the centre of their world, inviting domination by automated processes and algorithmic governance.^[3]

While Steyerl's metaphor of choice is the crystal ball, the tarot reader and the film editor might offer a different vision. Post-production is not a truly solitary process: it involves a sustained and intimate relationship with a technological apparatus. The hardware is the place of physical contact and the software, the site of selection from a limited set of options: the body does not vanish, it is already an active component of the machine. Similarly, the cards offer haptic instruction and symbolic propositions: Karen Gregory describes tarot as "*an occasion-generating technology that, with each flip of the card, opens the reader (and the querent) to the possible*".^[4]

Possibility is not to be confused with potential. The latter, as Deleuze & Guattari understood it, designates a future that cannot be predicted, a continual becoming-with, an unfolding of the virtual.^[5] Possibility, on the other hand, is pre-programmed: the provision or projection of limited choices. Digital technologies, built on binary code, are inherently possibilistic: it is only through their 'analogue' interfaces – bodily and material extensions – that potential might emerge. This is the role that Martina O'Brien performs, in her assembling of images and arranging of cards: the artist as interface, a kind of critical embodiment, something akin to a medium.

At Some Distance in the Direction Indicated gathers myriad threads of Martina O'Brien's fascination with the science and sorcery of climate prediction. It is perhaps unsurprising that weather conditions themselves, in their corporeal disorder, rarely feature. Instead, climate is extracted and rationalised through data, material complexity reduced to computational models. If a kind of ethics is at play here, it calls attention to the stasis and deadening effect of these kinds of abstraction. As Brian Massumi writes: "*Measurement stops the movement in thought, as it empties the air of weather, yielding space understood as a grid of determinate positions*".^[6]

Movement is instructional to the three-channel video work that the artist was developing when we first met. *Sites for Watching* (2017) yokes the inhuman eye of an unremitting drone as it glides over a governmental research farm in Wexford, to static portraits of the watchful, alien instruments of a weather station below. Both are counterbalanced by the quiet mise-en-scène of a herd of dairy cattle, as they amble inelegantly through their yard, and gaze with wary curiosity at the camera. The sequence echoes the care, tone and pacing of Gideon Koppel's *Sleep Furiously* (2008), a patient love-letter of a film, addressed to a Welsh farming community.

The artwork takes its title from Anna Tsing's proposal that observation can reveal unintended patterns and juxtapositions: "*Assemblages cannot hide from capital and the state; they are sites for watching how political economy works*".^[7] The proximity of animal and machine – and explicit exclusion of farmworkers or researchers – reveals the network of agents and dependencies behind practices of data collection and analysis, and decenters human agency. With their strong backs and heavy udders, and bulky but bony frames, the cows are honoured as protagonists, exhibiting strength and vulnerability in equal measure.

In this way, *Sites for Watching* forms a wordless speculation on a history of agriculture that might be told otherwise: a story of the taming and cultivation of the human, producing stationery, disease-resistant communities who clear forests, eradicate predators and produce pasture for the benefit of livestock. Levi Bryant has noted, "*Humans are as much determined and formed by the world around them, they are as much domesticated by non-humans, as they form and domesticate beings in the world about them. There is never a unilateralism of determination in the relationship of humans to non-humans*".^[8]

What then, of the instruments that watch the weather, or the drone with its mechanical temperament: did we build the machines to observe, or did the machines create a species attentive to their measurements?