

I am standing in the field, my field,
the islands of Orkney, to most,
the Energy islands to me.

Take a breath, because you are about to see a spaceship in dock.
For real. Or as close as I suspect you will ever come. As close as
I have ever come.

At first you see two massive, metal pillars coming out of
the sea, supporting what looks like a yellow container in the sky;
the kind you expect to be supported by a containership. It gleams
with the afternoon sun, low and sinking on the other side of the
boat. On it you can see a gantry, antenna, a profusion of docking
equipment that contains... you strain to make it out. The boat is
spiralling in and you can now read the white and blue sign on the
container side: OpenHydro, tidal technology.

The boat keeps sweeping in, and your neck strains back
as you look up and up.

A gleaming white, tide energy spaceship comes out of
eclipse from behind the side of the container, just as the Sun hits
(it really does). It is a vast white eye, a bladed iris, a huge disc
several (eight?) meters across, yet seeming to be weightless,
suspended above our heads. This is what the energy future looks
like, a great stargate of an eye, unblinking, staring into its own
future, beckoning me, beckoning you, into a tide renewable energy
tomorrow.

I am standing in the field, my field,
and we're doing cats cradle.
(Donna Haraway's game to weave the world,
before she went to the dogs.)¹
I weave the world with my words
pattern and punctuation—
pass it on to you. You pass it back
when we talk (soon),
and the pattern of the world is altered.

You did that.

Perhaps you think this performance is passive?
You watch, I work. T'was never thus.
Perhaps you are too pixel-burned by powerpoint?
You watch, it works. T'was never thus.
We are world weavers,
you and I.
And our looms are the machines we choose
to knit our world
(our dreams, our climate changed nightmares).
But machines only work one way.

You want another dream, another world?
Try other machines.
(Karen Barad has been banging on about this:
we're experimenters, and we have apparatus, too.)²
Paper, pencils, first person narrative:
Listen...

I am standing in the field, my field,
An industrial ruin: the archaeology of a concrete
building, a flat-roofed bunker, windows empty from long years
of wind on this summit at the edge of the islands. Inside, the
bunker is painted green with moss, the wooden batons that once
held the walls, no less green than the concrete walls. Outside the
doorway, there is a slate that has been freshly painted with the
words 'View Point', perhaps with irony, perhaps not—it depends
on the weather. Today, you can look out along the Orkney coast
and see the wind turbines planted high, their petal blades open to
the sky. They are flowers turning to the wind, making the islands
more than 100% powered by their own renewable and renewing
electricity.

The summit is derelict, scattered with broken concrete
blocks, glittering like old granite, and long maimed by rusted
metal cables, twisted, bent. This is wind energy archaeology.
What I see, what my hand touches as it strokes the edge of metal
and poured stone, is the remnants of the UK's first large-scale
wind turbine, something of a mystery installed in 1955 that soon
collapsed, folded into scrap.

This is the first of many energy technology test sites in
the islands, just one of many world or national firsts here, all long
forgotten by those who live elsewhere.

My companion, landscape poet, Alec Finlay, offers me a
packaging tag and I write a memorial poem, leave it for the wind.

*mica-encrusted tomb
to an unknown turbine*

I am standing in the field, my field,
your field,
What did you hear, what did you see?
What did you taste, and touch,
up there, on the summit with me?

Ah, but this place, this room, my voice
is but one machine,
and there are as many machines as they are stars
(Are we not star stuff?
Then our academia is star stuff, too;
our research is made from the elements inside a star;
what did you think heterogeneity meant
what did you think material-semiotics was for?
It was always more than words.
It was the ink, too.)

This ink is from a risograph printer.
the folds, the opening up, the experiment in paper-
It was created to enchant a data-bored IT industry,
to weave a paper-data world
one that cannot move in digital bits.

Where data is made from a numberless sunset

For years now, high on the cliff-top above the shoreline, orni-
thologists have been watching and counting the seabirds. They
are making a baseline, seeking stable patterns – of migration,
feeding and mating movements, all of which shift over months
and decades.

Baseline? Starting from when? Seabirds can be counted,
but they are surprisingly resistant to transduction into meaning-
ful numbers.

And how to produce a baseline for that unnumbered
quality captured by artists, that people feel as look towards an
orange island sun slipping into the sea? This is a serious question,
for the EIA (Environmental Impact Assessment) is a serious doc-
ument. How do we find ways to include those important qualities
that we value as experiences, and represent them as baselines
to preserve? How do we make data when quantification is not
possible?

To help find an answer to that question, a group came
together to tell stories about that seascape: a poet, a photogra-
pher, an archaeologist, a marine biologist, a storyteller. Their data
stories were both empirical and mythical, in poetry and in pho-
tographs. For, when numbers cannot be made, there are many
ways to transduce data.

I am standing in the field, my field.

“[Marine energy is] at the stage of the Wright Brothers after
their first flight,” says Neil Kermode, the director of the Europe-
an Marine Energy Centre over noodles; we are grabbing dinner
before the Orkney International Science Festival starts.

“It's proven, and it's for sale, but its a long way from a
commercial airline [industry]... The bright side, for us, is that
the Wright Brothers sold the second and third aeroplanes they
made. They were a commercial business from the second plane
onwards... But people are expecting an Airbus...”

He shakes his head, rolls his eyes, this former diver in
a suit who looks as if he has a rebreather and facemask stashed
under the desk back at his office, the desk where he is on the
phone with equal intensity to local fishers and the First Minister
of Scotland alike.

“They all come here [to Orkney], think it is happening
here,” he says, and it's true. People from Silicon Valley Venture
Capitalists to Taiwanese Government Scientists, to say nothing
of the unending television and film crews, they all come to the
Energy Islands: “the first town powered by the Moon” frothed
one report.

“And,” Neil continues. “they are a bit surprised at the
old school and nine people...”

“There was a Canadian guy in fisheries who said we
only have ten thousand people. Oh, I said. We have ten — ten,
almost.”

I am standing in the field, my field,
your field,
Perhaps it has people in, places, technologies...
futures.

Energy futures:
that is my fieldsite, my making, my care.
I tend with the science fiction authors,
those other world-weavers, who say that
it is not about predicting the future,
but about laying out a roadmap of possibility,
one dark, island street at a time.

So, here we are,
in this conference machine,
world weaving,
fields and theories.
We are future-makers,
and future-breakers.
(What did you think ontology turns into?)

Drive up and over the hill, and hold your breath. You will know
when the moment comes. You will feel the islands take you, your
innards will slip as you pass through from one world to another,
from Orkney to the Energy Islands.

After all these years, I never quite know when it will
happen, never quite believe that it will.

There. Over the horizon, holding out a promise of an
other world: those two anvil-flat hills, their dark, struck shapes
sliding in and out of the clouds. They are over the sea, on Hoy,
the high island, as the Vikings named it. Somewhere on those
hills, two kings still fight, it is said, the dead rise at the end of
each day, resurrected by the seiðr magic of one of the king's
daughters, and the battle goes on, until the end of time.

I was told once that, “Orkney is a place where you have
always been able to break through to new worlds.”

No wonder this place is more than powered by its own
wind, waves, and tides, lies far in the future, light years ahead
of the European Union target to be powered by a mere 20%
renewable energy by 2020. Twenty one thousand islanders at the
edge of Europe have been living in our future world for years;
and through the marine energy industry, they are making it for
us, too.

I am standing in the field, my field
But no more words, no more ink,
Only light.
(Our academia is star stuff,
there are as many machines for our work as stars...)
Let the light in.

Footnotes

1. Haraway, Donna (1994) A game of cat's cradle: science studies, feminist theory, cultural studies. *Configurations*, 2(1), 59-71.
2. Barad, Karen (2007) Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning. Duke University Press.

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PIXELS AND PENCILS
Improving Methods for Writing Futures
— Laura Watts

Wordmap

Nordic STS
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I am standing in the field, my field,
your field.
Tell me about your field...