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Chapter 7 Sailing with Gregory Bateson

Peter Reason

Like many small boys of my generation, my enthusiasm for sailing came originally from my avid reading of Arthur Ransome's *Swallows and Amazons* series. The accounts of the Walker and Blackett children's imaginative adventures in the English Lake District and Broads were accompanied by vivid and completely realistic accounts of sailing small dinghies. Ransome's description of the gybe that led to Swallow crashing into a rock in Swallowdale is both technically accurate and deeply evocative. Reading these books gave me an illusion I could already sail – an illusion that was destroyed the first time I got into a sailing dinghy and capsized it before I had left the jetty. So I took lessons and over the years learned to handle a sailing dinghy more or less competently.

I started sailing larger cruising yachts when my two sons were in their early teens. Fired up by Robert Bly's insistence on the importance of the relationship between fathers and sons (Bly, 1990), I chartered small yachts and took Ben and Matthew, along with other men friends, on increasingly ambitious sailing adventures in the English Channel. We learned a lot about how to live together and look after each other in challenging conditions. I bought my own yacht, Coral, just at the time when the boys were leaving university and getting into their independent lives and responsibilities, and were no longer available.

By this time, my sailing was taking on another dimension. I was increasingly concerned about the state of the planetary ecology. At the University of Bath I was developing undergraduate and Master's teaching programmes (Marshall, Coleman and Reason, 2011; Reason, 2001, 2007) and initiating and leading action research projects around sustainability issues (Reason et al., 2009). Intellectually, I was guided and influenced by Gaia theory (Harding, 2009), deep ecology (Naess, 1990) and above all by Gregory Bateson's particular brand of systemic thinking (Bateson, 1972, 1979; Bateson and Bateson, 1987). He has been one of my intellectual heroes since I first read Steps to an Ecology of Mind (Bateson, 1972) in the early 1970s and struggled to understand what he was saying. It took me years to appreciate his work. Bateson pointed out that human beings and human society are embedded in the general systemic structure of the natural world, which, he argued, was self-organising and self-transcending, qualities he saw as essentially those of mind. However, the Western perspective abrogates the notion of mind to the human and separates it from the natural world, which it sees as mechanical and mindless, leading to what Bateson has called 'pathologies of epistemology' - there is something fundamentally wrong with our ways of knowing. He wrote as early as 1969, well before the current 'environmental movement' developed: 'Epistemological error is all right, it's fine, up to the point at which you create around yourself a universe in which the error becomes immanent in the monstrous changes in the universe that you have created and now try to live in' (Bateson, 1972, p. 485).

The idea of epistemological error brought about by non-systemic thinking influenced my own teaching and research and that of my colleagues and students (see, for example, Marshall, 2004; Marshall et al., 2011). But increasingly it became part of the perspective through which I saw and experienced the world, including my sailing experiences.

Since I retired from academic life I have recast myself as a writer of ecoliterature, exploring how to express Gaian and systemic ideas through creative writing, as in the following description of sailing through the Chenal du Four.

The Chenal du Four is the inner passage round the northwest corner of France, available to a small coasting boat wishing to avoid the longer and more exposed passage in the open Atlantic. The Chenal opens in the north between Le Four lighthouse on the mainland coast and Île d'Ouessant to the west. Le Four is familiar to many people from the photographic prints by Guillaume Pilsson showing a wave breaking right over it in a storm. Île d'Ouessant – the island traditionally known to British sailors contemptuous (or maybe incapable) of French pronunciation as Ushant – is off the northwestern corner of mainland Europe, the southern entrance to the English Channel, celebrated in the old sea song Farewell and Adieu to You, Spanish Ladies:

We will rant and we'll roar like true British sailors, We'll range and we'll roam o'er all the salt sea. Until we strike soundings in the channel of old England; From Ushant to Scilly 'tis thirty-five leagues.

On the west side of the Chenal, south of Île d'Ouessant, a series of wild rocky outcrops and islands stretch down toward its southern end, where it opens onto the Rade de Brest between a dangerous expanse of underwater reefs and rocks called the Chausée de Pierres Noires and Point de St Matthieu on the mainland.

This is rightly called 'Finistère', the end of the land. Here, France thrusts out west into the Atlantic Ocean, diverting the tidal streams so that huge quantities of water flow twice each day in and out of the English Channel and the Bay of Biscay, forced through narrow channels between the rocks and islands. The currents here are strong and complex. At the northern entrance, where the Chenal is open to the North Atlantic, a huge swell can develop as water piled up by winds in the middle of the ocean rolls in toward the land. In the Chenal itself strong winds blowing against big tides can make the surface rough, but even in calm conditions the stream, swirling around the rocks and shallows under the water, creates strange ripples, eddies and overfalls that take hold of a small boat almost as a toy in a bathtub.

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at huge quantities of d the Bay of Biscay, The currents here are is open to the North in the middle of the blowing against big the stream, swirling ripples, eddies and tub. I was on route in Coral for Southern Brittany. The word 'yacht' may be misleading, possibly implying the grandeur and ostentation of hedge-fund traders and Russian oligarchs. Coral is a Rustler 31, small and rather elderly. She was built in the 1960s for offshore racing but is completely outclassed by more modern designs. I have sailed her all over the Western Channel for nearly 20 years, making passages to France, Spain, Ireland, often with my sons or with friends as crew, and sometimes on my own. With a heavy keel deep in the water, she is very seaworthy.

I started sailing seriously when my two sons were teenagers as a way of growing up together. Over the years, sailing has become a kind of pilgrimage for me, an encounter with the forces of the more than human world, with the rigorous beauty of the sea. I have noticed that, when asked to think of a place in the natural world that is special to them, most people think of a hillside or a woodland; for the more adventurous it may be a mountain peak. The special place for me is out of sight of land somewhere in the entrance to the English Channel, where the broad Atlantic Ocean with its waves, currents and weather systems, meets the constricted waters of the northwest European coast.

On this passage I was sailing with my young American friend Monica. We had crossed the channel from Plymouth two days previously and had made our way down the French coast to L'Aberw'rach to wait for favourable winds and tide. L'Aberw'rach is a small river estuary about 10 miles west of Le Four. Here the river emerges into the sea through narrow channels between rocks and underwater reefs. At high tide the estuary fills, so that many of the rocks are submerged while the others rise dramatically from the water. At low tide these same rocks are connected by long sandbanks, golden in sunshine or greyed out lines through mist and rain. Tidal streams flow across the estuary and can carry the boat sideways into the hazards. The safe passage is found by following leading lines, indicated by alignments of beacons built on rocks and on shore, or by a lighthouse with a distant church spire – that show where the channel is to be found.

In clear weather it is great fun to sail through close to the rocks, the depth sounder showing that the boat is in deep water; but with poor visibility it is easy to lose one's sense of direction. The Grand Chenal out of L'Aberw'rach is particularly alarming because Le Libenter, a long hidden reef, is shallow enough to be dangerous, but deep enough that the waves do not always break to mark where it lies.

The Chenal du Four itself is only passable in a yacht with a favourable tide, so ideally we need to time our arrival at Le Four just as the tide turns south. But the peculiar way the tides interact with the coastline means that a yacht leaving L'Aberw'rach to catch the favourable tide down the channel arrives at the northern entrance after half the south-going stream has gone. In addition, the whole of this coast is littered with outcrops of rocks, some visible, some lurking underwater and some reaching way offshore. A safe passage involves a long detour offshore or careful inshore pilotage. It is not easy to know when to set off to make the best of the conditions. Every evening we joined the anxious little crowd around la Capitainerie, where the weather maps for the following day

were posted, and joined in discussions in broken 'franglais' as to when would be the best time to leave.

After a little wait we decided the perfect weather would never arrive and left L'Aberw'rach on a wet and windy morning. As Monica dropped the mooring line and we motored away from the buoy, cloud and fine rain descended on the river. Quickly the mist was so thick that all the leading lines were obscured. For a moment I was alarmed and tempted to turn back. But soon the weather cleared enough for us to get out safely along the Grande Chenal, past Le Libenter, out into the channel.

Once we were safely clear of the outlying rocks we turned westwards. I checked our course carefully, for a while clambering up and down between the cockpit, from where I could see landmarks and take compass bearings, and the pilot seat below, where I could check our position on the instruments and against our large-scale chart. I decided that with Coral sailing close to the fresh southwesterly breeze we would clear the hazards safely. We settled down for a long haul through the rain and mist.

One of the challenges of long shorthanded passages at sea is simply sailing the boat effectively while attending to navigation and other necessities and getting sufficient rest. The person at the helm will tire after a couple of hours at the most and lose concentration. So I have equipped Coral with Aries, a self-steering system bolted to the stern with a wind vane above and a paddle deep in the water below. The wind vane is set so it stands upright when the boat is on the correct course. When the boat wanders off course, the wind catches the side of the vane and blows it over and, through a clever system of gears, turns the paddle. The flow of water past the boat forces the paddle to one side and lines connected to the tiller move the rudder to correct the course. The wind vane returns upright and everything returns to its starting point - although in practice there is constant movement as small adjustments are made to respond to wind and waves. Aries works as a simple cybernetic system, encompassing all of what Gregory Bateson called 'criteria of mental process' (Bateson, 1979, p. 92). Information about the correct course flows in a circuit between the sails, the hull, the wind vane and the rudder, and the system is powered, not by electric power derived from fossil fuel, but by the movement of the boat through the water. I find it delightful that Aries works on the same principles as all natural ecological systems to maintain a dynamic balance around a zone of relative stability.

So with Aries taking care of the steering we could huddle under the sprayhood, half out of the rain. All the morning and into the afternoon we made a series of long tacks, far over toward Île d'Ouessant on a port tack and then back again toward the mainland on starboard. At the end of the port tack we could just see the high coastguard watchtower that dominates the eastern end of Ouessant, faintly standing up through the mist. At the end of the opposite starboard tack, Le Four and the mainland would emerge dimly, breaking surf on the rocks. Each time we tacked we headed back into a featureless sea, sailing on through shades of grey, lighter above in the mist and clouds, darker below in the water and waves.

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sprayhood, a series of back again ust see the int, faintly t, Le Four th time we so of grey, On occasion our track crossed that of another yacht working up into the wind like us, and we felt mildly competitive – were we doing better than them? Were we holding a course closer to the wind? We were very scornful of the German yacht that had motored all the way from L'Aberw'rach. It had taken a more cautious route than we had, going further out to sea before turning south, so it passed us twice. But most of the time it felt desolate and lonely, as if we were sailing our tiny boat on and on to nowhere, across a sea with no boundaries.

The swell came out of the Atlantic, rolling hills of sea that we sailed up and down, and then up and down again, knocking our way through the shorter sharper waves set up by the wind and the tide. Several times Monica and I remarked to each other how well Coral was sailing, how hard we were pushing her, how she was moving through and over the waves so smoothly, as if to reassure ourselves that maybe we were actually getting somewhere. I read our position from the GPS and marked it on the chart. Yes, we were making progress, but in this grey mist it felt unreal. But in that unreality we were also strangely happy. We were warm and dry and not too uncomfortable. We were doing the best we could in the circumstances. Above all, we were sailing, and sailing well in unpleasant conditions. It was oddly rewarding.

After a while the cloud lifted a little and I could see a beacon tower some way in the distance. Consulting the pilot book and chart, I identified it as Le Faix on the Plateau de la Helle. Checking the tide times again, I realised that with these long tacks doubling the distance we had to travel, we would not make it through the Chenal before the tide turned against us. The wind had not, as I had hoped, veered westerly, allowing us to sail a direct course. We would have to use the engine and motor sail straight down the channel.

Motor sailing – with both engine and mainsail working together – and with the electric Autohelm taking over from Aries, we moved much faster and closer to the wind. The log showed that Coral was now making 6 knots through the water and the GPS that the tide was adding 2–3 knots to this. We raced south and would easily reach Pointe St Matthieu before the tide turned.

The whole sensation of moving through the water had changed: we were forcing our way into the wind rather than working with it. A mechanical wake of water stirred up by the propeller streamed out astern; the bows crashed directly into and through the waves rather than riding obliquely over them. No longer balanced against the wind, Coral sat level in the water yet pitched up and down as if irritated by the waves. And instead of the slap of the waves, the hum of the rigging and the wind in our ears, the steady roar and vibration of the twin cylinder diesel engine under our feet, running at almost maximum power, dominated everything.

Edward Abbey in *Desert Solitaire* wrote of turning on the generator outside his trailer in the middle of the slickrock desert in order to have light to write a letter. Unable to hear anything but the clatter of engine noise, he was 'shut off from the natural world, sealed up, encapsulated, in a box of artificial light and tyrannical noise', exchanging a 'great and unbounded world for a small, comparatively meagre one' (Abbey, 1968, p. 15).

It was not quite like that in the Chenal de Four. I was still standing in the open air in the cockpit, legs braced and balancing against the movement of the boat. I faced the wind, peering under the peak of my cap and over the top of the sprayhood, eyes narrowed to keep the fine rain from my eyes. I was looking out for buoys and beacons on our course down the Chenal, and indeed for other boats. We had to slow down to make way for a seaweed-harvesting barge, laden to the gunwales with the load of a day's work, as it crossed the channel on its way back to Lanildut, its home port and the centre of seaweed harvesting on this coast.

I was not shut off from the wider world but my relationship to it had changed, forcing my way through it rather than riding with it. To adjust my course, rather than physically pull the lines that adjust the Aries vane and winch in the sheets of the sails, I simply pushed a button on the Autohelm – 10° or 1° , port or starboard, as I chose – and the boat's heading changed. I had not actually changed the laws of physics, but I was using them in a different way, a way that gave me the illusion that I could cut straight through all the obstacles and go directly to my goal.

This reminded me of one of my favourite pieces of Bateson's writing, *Conscious Purpose Versus Nature* (Bateson, 1972). Bateson starts off by exploring how dynamic balance is maintained in natural ecosystems. An undisturbed woodland, for example, contains many different species. To survive, each must be capable of reproducing exponentially, as did the pet mice I kept as a small boy (we bought four and a year later had over 100, much to my mother's horror). The population of each species is maintained by a combination of interdependence and competition. Any species whose activities are unchecked will grow to dominate and overwhelm the ecosystem.

In a balanced ecological system whose underpinnings are of this nature, it is very clear that any monkeying around with the system is likely to disrupt the equilibrium. Then the exponential curves will start to appear. Some plant will become a weed, some creatures will be exterminated, and the system as a balanced system is likely to fall to pieces. (Bateson, 1972, p. 431)

In contrast to this, human awareness and activity is ordered by conscious purpose: we see what we are interested in and go straight for what we want. Conscious purpose cuts across the complex dynamic balance of ecosystems. It has done so since Neolithic farmers began cutting down forest to create farmland. It is particularly destructive when linked with a powerful technology.

We humans have for a while overwhelmed our historic predators – infectious bacteria as much as sabre tooth tigers – and draw on the buried energy of millennia, as does my marine diesel, to go directly for what we want. Bateson is challenging: conscious purpose 'is a short cut device to enable you to get quickly at what you want' rather than act with wisdom. Wisdom is 'knowledge of the larger interactive system', which if disturbed may rapidly degenerate. A species 'unwise enough to quarrel with its ecology' will cause trouble for itself and other creatures, for 'lack of systemic wisdom is always punished', writes Bateson (1972, p. 434).

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Having a reliable diesel on a yacht makes the kind of voyaging I do possible. Yet when I start the engine to push against the prevailing conditions, I always feel regret as well as relief. Here in the Chenal de Four we *could* have found a place to anchor and wait for the tide somewhere between the rocks off the French coast, but it would have been uncomfortable and delayed our progress. Using the engine to make the best of this failing tide, we would get through the Chenal and reach our planned destination after nightfall but still in time to pick up a mooring buoy and have some supper.

I was both pleased to be making progress and disturbed by the implications of what 'progress' meant. Just as Aries reminds me of the balancing feedback of ecological systems, starting the engine reminds me of the shadow of human ingenuity, which means that we live in a time of dangerous climate change, loss of species and degradation of ecosystems – the 'monstrous changes' that Bateson warned of in the 1960s.

We still had a way to go: 12 miles to Pointe Saint-Mattieu and then another 10 or so to Camaret. As the engine urged us forward we passed between the red and green buoys that mark the rocks at La Plâtresses and followed the channel down to the narrows off the port of Le Conquet. There the large red octagonal structure of La Grande Vinotièrre dominates the middle of the channel. The last time I came this way, the tide was running strongly past it, creating a standing wave upstream and a wake of disturbed water running 100 metres or so downstream. But this evening the stream had run its course and as we passed, the waters lapped quietly at its base.

We turned east round the Pointe Saint-Mattieu, with enough light to look through binoculars at the complex of beacons, lighthouses, radio towers and the old ruined abbey that stand high on the cliffs. We motored on across the Avant Goulet de Brest to Camaret. We could have sailed this last bit but the wind had dropped and, once the engine is running, there is always the temptation to keep it going and press on. As I expected, we arrived after dark but with enough light to find a vacant mooring buoy. Safely secured, we turned off the engine and in the delightful silence made a quick supper – pasta, pesto and Parmesan cheese again, it is all we could manage – and fell into our bunks.

In his account of Gregory Bateson's life and work, Noel Charlton points out that in the last 10 years of his life, Bateson was increasingly concerned about ways in which Western errors in epistemology were having a serious impact on the ecology of the planet (Charlton, 2008, chapter 5). He was also continuing to explore a theme he first developed in his early anthropological studies, linking the aesthetic and the beautiful in nature and in human art with the possibility of enlightened ways of being. Creative activity and appreciation of art is a means of recovering grace, the reintegration of the 'diverse parts of the mind' – especially those we (maybe wrongly) call the conscious and the unconscious. And he increasingly began to link these two themes, suggesting that aesthetic engagement is an essential part of a path toward ecological wisdom, for the appreciation of

the systemic quality of the natural world is primarily an aesthetic, rather than an intellectual experience.

So my delight in the systemic qualities that allows Aries to work so well lies as much in my appreciation of its elegance as in my understanding of the feedback loops. My feeling that it was 'oddly rewarding' to tack to and fro across the entrance to the Chenal du Four arises from the graceful interaction of Coral with the wild tidal waters we were encountering and our sense of being embedded in our natural context. And the move away from this grace to the pounding against the waves, while (perhaps) rationally necessary, was aesthetically disturbing.

One of Gregory Bateson most quoted phrases is 'The most important task today is, perhaps, to learn to think in the new way' (1972, p. 462) – and of course he means not just thinking intellectually but in the whole manner of our engagement with our world. Sailing can, of course, be an over-heroic attempt to conquer the waves. I hope I have shown that it can also be a way of healing pathologies of epistemology and beginning to rediscover the experience of grace.

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