RUMMAGING THROUGH THE USEFUL BAG
Alastair McIntosh

I travel greatly with my work, and I always carry around with me a little bag that contains a range of tools. I call it my Useful Bag. It’s based on the Useful Box that I used to keep in my pocket when I was a schoolboy. This was a two-ounce Golden Virginia tobacco tin that held such necessities as a penknife, razor blade, fish hook and line, length of string, some nails, a magnet and a magnifying glass of sufficient strength to burn holes.

You never knew when the Useful Box would come in handy. I remember one sunny day when our French teacher, whom we called Bulldog, walked into our classroom to find the air blue with smoke, and insisted that all of us boys emptied out our pockets so that she could establish ‘who has the matches?’ We duly laid out our wares on the desks. Magnifying glasses abounded, but not a match was in sight. Had Bulldog peered more closely, she would have seen that the desks were newly etched with our initials freshly burned in charcoal. But she didn’t, and so we evaded punishment with the leather tawse that might have caused a different kind of smoke to rise up from our miscreant hands.

My adult version of that little tin, my Useful Bag, stands in the same tradition. Weighing in at a mere half kilo, its contents include a Stanley pocket screwdriver set, rawlplugs to fix loose screws, screw-in eyelets for suspending a washing line or mosquito net, a length of string, a needle and thread kit, a diode torch, a USB stick, a laser presenter/pointer, a headphone splitter jack, a Wi-Fi signal booster with extension cable to stretch out of a window, three amp, five amp and thirteen amp plug fuses, an electrical connecting block for joining wires, a length of copper wire, a flint for making fire (back up to the magnifying glass) and a sawn-off mains testing screwdriver.

Why sawn off? Because these days, a portable tool kit must be able to get past airport security. The ongoing fallout from 9/11
explains the sorry omission of my Swiss Army knife, which has saved my bacon more than once. Back when I was living in Papua New Guinea (PNG), I got locked inside a government building after hours. All the phones had had padlocks fitted to prevent dialling out. A few deft strokes of the hacksaw blade’s Swiss steel got me out of trouble that night.

When I look for something in my Useful Bag, it’s always a rummage. This article’s going to be a rummage, too: a raking through a jumble of old tools and thoughts about them. I want to turn the nuts and bolts of life, and tinker with the question that we all circumnavigate when we think about tools or technologies: the timeless question of our values.

Tools as rites of passage
I grew up on the Scottish Isle of Lewis, where the use of a tool was a rite of passage. My parents gave me a border spade when I was about ten. It was quite the smartest and, from their point of view, most self-interested birthday present ever, because all I wanted to do with it was go out and proudly dig over the vegetable garden. I loved that spade. On frosty winter mornings, I’d rise early, go outside, and spread grit on the steep brae that went past our house. There were no gritting lorries back then, in the late 1960s. We were the gritters. You contributed to the community and you were always contributed to in return.

Northern Hebridean culture is very like that of Ireland, though Protestant, and an Irish proverb speaks equally to our communities: ‘It is in the shelter of each other that the people live.’ On one occasion, well before the sun had risen, Angus John Macleod (who was the Leurbost butcher) was so relieved to be rescued from his wheels in an icy spin that, on his way back home in the evening, he stopped at our house and dropped off a bag of prime steak.

When I left Lewis and went to Aberdeen University in 1973, I was determined to follow the path of science and not the Bulldog’s path of arts and the humanities. But in the course of pursuing a Bachelor of Science degree, I quickly found that science as an intuitive understanding of the properties of matter was not the science being taught at university. My love was geology, but crystallography soon ceased to be about the beauty of stones and became lumpen mathematics. When I failed first year chemistry, Dr Frazer, a wise old advisor of studies in the Department of Geology, pointed
me instead towards moral philosophy. When I failed my second year geology as well, he shook his head, smiled with a twinkle of wry conspiracy, and suggested that psychology might fit me better.

In the Department of Psychology there were three professors. I was immediately made to feel comfortable by Professors Elizabeth Fraser and John Symons. They believed in the education of the whole person, and valued teaching students more highly than grant-grubbing or the obsessive publication of their own research. To them, the 'two cultures' divide between the arts and the sciences was pernicious. The third professor of psychology ran what was called the Animal House. From that building, inaccessible to us undergraduates, came dark tales of monkeys with their skulls capped off, electrodes sticking like syringes into their brains. I remember, one day, skidding to a halt on my bicycle, pausing to say a flying hello to John. He nodded towards the Animal House. 'I fear,' he said, 'that the future of our discipline is to be pulled more and more towards the Animal House than your interests or mine.'

Psychology, like so many other university disciplines, was becoming canonised by quantification, the idea being that everything, from love to religion, can be explained by reasoning alone. But John and 'Betty' were not to go down without a last hurrah. Even reason rests within a field of values. In 1976, Corgi published the paperback edition of a book that had become an instant classic. Its cover grabbed me at the visceral level: it was love at first sight. It showed a spanner with the wrench at one end and a lotus blossom melded to the other.

In those days I was spending most of my time on the fringes of the curriculum, avidly reading Abraham Maslow, spiritual classics such as the Bhagavad Gita, parapsychological monographs and the novels of Hermann Hesse. Inbetween, my head wrestled to get round the incongruously big words of Paulo Freire’s Pedagogy of the Oppressed. We science students – we knew the formula for everything but the vocabulary for very little. I kept a notebook of the words I’d looked up, and would try to memorise them. I’d go and sit amongst the lotuses and magnolias in the Cruickshank Botanic Gardens having spent my beer money on such psycho-nerd pursuits as a subscription to the Journal of Transpersonal Psychology.

One day I wandered into the psychology class and there was Betty, subsequently reinforced by John, holding up the book with the motif of the lotus spanner. They urged us all to buy it. It was
now prescribed reading – this was the Advanced course – and it would teach us, they said, how to think about scientific method. The author was an unknown American philosopher, Robert Pirsig. The title: *Zen and the Art of Motorcycle Maintenance*. The subtitle: *An Inquiry into Values*.

They say that you never forget your first love, and there’s a phenomenon with certain books in our lives that is similar. It can be like a religious encounter. Whether scriptural or otherwise, there are books that stir the soul and open doors on spiritual awakening.

Probably, if I read Pirsig with a critical eye today, I’d nitpick cause for disappointment. At the time it gave me what I thirsted for. It tripped me out into first love. More than that, I needed its practical wisdom for a practical purpose. I was about to head off with Voluntary Service Overseas, out into the sticks of Gulf Province in PNG. I was training with the Auto-Cycle Union, sitting my driving test and learning basic motorcycle maintenance. In the East, they have a saying: ‘when the student is ready, the teacher arrives.’ In Betty’s and John’s wake, Robert Pirsig had arrived at just the perfect moment: his was spiritual teaching in a mechanic’s robes.

**Tools that articulate Areté**

On the surface, *Zen and the Art of Motorcycle Maintenance* is a travelogue. As Pirsig and his son set out *Easy Rider*-style across America, he’s puzzling at the signs of human alienation all around. His friends, John and Sylvia, aren’t interested in carrying out the maintenance of their own machines. If they broke down they’d be stuck, whereas if Pirsig broke down, he’d know how to apply scientific method to the problem, to avoid ‘gumption traps’ and stick with it, and he’d find his problem in the end. How? By judicious application of the knife of logic. He’d break the fault down into its component parts: the electrics, the fuel system, the mechanical parts, and if the latter: engine or transmission? By controlling and testing this and that, bit by bit he’d methodically isolate the problem down and pinpoint the trouble spot.

Far from being reduced by such reductionism, Pirsig finds himself uplifted by it. He’s used it as a tool, not as a worldview that would have dominated the wider holding of his life. You pick reductionism up. You put it down. Here a twist of the carbon steel of the spanner, the refracting *mani* diamond of the mind. There the turning of the prayer-wheel of the lotus, the integrating *padme* of
the cosmic heart. *Om mani padme hum.* God is when the diamond mind rests in the lotus heart, undivided. Pirsig doesn’t put it like that: that’s what I learnt subsequently from the Buddhist writer, Jack Kornfield. However, it’s implicit to Pirsig’s approach, crazy though it made him for a while in trying to reconcile himself to a contrary world.

Pirsig feels that he is a part of the technology upon which they are voyaging. He’s in tune with his bike, but his friends are out of synch. Sylvia goes into a gloom. What had brought it on, she explains, was the look on the faces of all those people coming the other way in their cars. ‘The first one looked so sad. And the next one looked exactly the same way, and the next one, and the next one, they were all the same.’

The theme recurs much later in the book. They’d stopped in a town where everyone seemed alienated. ‘Lonely people,’ Pirsig surmises. ‘You catch it in the first fraction of a glance from a new face – that searching look – then it’s gone.’

‘It’s paradoxical,’ he reflects, ‘that where people are the most closely crowded, in the big coastal cities in the East and West, the loneliness is the greatest.’

The problem for John and Sylvia, he concludes, is that they’re alienated from their world. They’re not living in that all-round excellence that the Greeks called *areté*, or Quality, as he translates the word. They wouldn’t know where to begin tuning a motorcycle. They’re out of tune with themselves, and therefore, out of tune with their choice of and relationship to technology. He’d seen it back at their home with a dripping tap. The drips were driving everybody crazy. John had tried to fix the washer but gave up. What’s more, he didn’t want to learn. He veered away from Quality, and this worked against his quality of life. It led to alienation, to varying degrees of loneliness within.

‘I’m undoubtedly overgeneralising,’ Pirsig concedes of his analysis, and yet, he says, ‘a person who knows how to fix motorcycles with Quality is less likely to run short of friends than one who doesn’t. And they aren’t going to see him as some kind of object either. Quality destroys objectivity every time.’ As such:

The real cycle you’re working on is a cycle called *yourself*. The machine that appears to be ‘out there’ and the person that appears to be ‘in here’ are not two separate things. They grow toward Quality or fall away from Quality together.
Tools for the computer age

It was in November 1977 that I had headed off to PNG. Together with my Hebridean crofting background and the help of missionary priests who knew everything about worldly practicalities, and perhaps a little about Heaven too, I applied Pirsig’s version of the scientific method to my work. I ended up wiring up small schools, hospitals, a church and two small-scale hydroelectric schemes. It was a phenomenal adventure for a young man. I came back, did a financial MBA at Edinburgh University to get more tools into my Useful Bag, then returned to PNG in the mid-eighties for another two year stint.

This time I was financial advisor to the South Pacific Appropriate Technology Foundation (SPATF). There, I encountered the Whole Earth Review, its journal Co-Evolution Quarterly, and its ethos – from Ivan Illich – ‘Tools for Conviviality.’ One of our projects was Village Equipment Suppliers (VES), which sold high-quality hand tools to communities that didn’t otherwise have access to such technology. These were communities into which I could go and get the stone axe head I’d been given bound to a wooden shaft by a man who still remembered how to do it – the proof hangs on my wall to this day.

My task in SPATF and VES was to computerise the accounting and credit control on a BBC microcomputer with a Z80 second processor. It actually worked incredibly well. The PNG nationals loved it. To the chagrin of some of their expatriate counterparts, they leap-frogged over cumbersome accounting procedures such as the Kalamazoo ledger system, and in one step launched right into Sage and spreadsheets. Thirty years later I’m still in touch with the children of some of those people. It was high tech rather than ‘intermediate tech’, but we all felt it to be appropriate tech. Why? Because conviviality thrived. If an auditor is one for whom accountancy is too exciting, we actually got high on doing the books.

Computers were becoming all the rage. Everybody in management the world around was going off to learn programming languages and debating whether the future lay with Algol (passé!), Fortran, Basic or whatever was the flavour of the month. I probably made myself unpopular with the programmers who ran these courses. In both the Scottish press and PNG I wrote newspaper articles arguing that, for most managers, programming skills were
a complete waste of time. It was like taking hold of a tool by the wrong end. Better use a tool to dig. Instead of trying to be a programmer, learn instead the pre-programmed packages that were fast becoming available. Word processing, spreadsheet, database, accounts, graphic design, and depending on what line you were in, CAD/CAM.

Oh yes, we loved the jargon, we were kids with new toys, but the great thing about computing back then and in that cultural context was that it placed both expats and nationals at exactly the same starting point on the learning curve. Furthermore, the nationals, whose grandparents knew all about stone axes and how to string a bow with strips of bamboo skin, were very much more adaptable. The whole shebang was novelty to them (this, by the way, is probably part of China's industrial success today in times of very rapid technological change). In contrast, expat managers in PNG considered, for example, that keyboard skills were for secretaries.

In working with the transfer of tools and their technologies, most of us were very much into Stewart Brand's *Whole Earth Catalog* and *CoEvolution Quarterly* (CQ). This mixed technology with mysticism and whole-systems ecological thinking. It was the bible of the back-to-the-land movement. But that movement was faltering. The world was rapidly changing. Many of the back-to-the-landers had moved back again; still hippies at heart, but chastened by the tough exigencies of lives too close to Mother Nature. These things can be fun when you're young, but tougher as you age without very much by way of traditional support structures.

A new era was opening. In Issue 43 of the autumn of 1984, CQ announced its change of name to *Whole Earth Review*. This was to be a 'livelier snake, new skin'. 'Tools for Conviviality' was undergoing spectral shift. A new strapline proclaimed: 'Tools and Ideas for the Computer Age.'

As if to ward off new demons, the first edition, Issue 44, ran as its title topic: *Computers as Poison: all Panaceas become poison*. But as the reviews for hardware and software expanded, those for tools like Swiss Army knives fell away. At first it remained very hands-on. Those were the days of home computer repairs where, for example, the magazine taught you how to test for a dud memory chip by piggy-backing a good one in parallel on top. But there was a worrying side. Actual reality was more and more morphing into virtual reality. A decade later, the thought came to me that, perhaps: *the computer is the virus*. At the very least the technology
was changing how we lived our lives, and not always in ways conducive of a deep conviviality.

As for Whole Earth, Steve Jobs has said, ‘When I was young, there was an amazing publication called the Whole Earth Catalog, which was one of the bibles of my generation... It was sort of like Google in paperback form, 35 years before Google came along: it was idealistic, and overflowing with neat tools and great notions.’ I kept on subscribing for old time’s sake until, in 2003, the soul fled the snake and the magazine went defunct. You could say it’s become Google now; an entity that has formally adopted as its motto the simple phrase: ‘Don’t be evil.’ What was that about ‘all panaceas’?

**Fire and smoke?**

I love good technology, new and old. I use computers all the time, not least these days in my hearing aids, which carry many times the processing power it took to land a man upon the moon. But for me, if we are to minimise evil, the central question to keep on asking of any tool or technology is this: *What does it serve?* Only then can we dodge the pitfalls of idolatry: the worship of false gods.

In 1990 I was on the committee of Scottish Churches Action for World Development when its visionary Secretary, Alastair Hulbert, invited the great Hindu-Catholic, Spanish-Indian theologian, Raimon Panikkar, to give a public lecture in Govan, the shipbuilding area of Glasgow in which I now live. Panikkar’s title was *Agriculture, Technoculture or Human Culture?* In the MacLeod Hall of the Pearce Institute he told the story of the first ever Indian commercial airline pilot. After graduating from flying school, we were assured, he had revisited his village to seek blessing from his old mother. Taking him by the hands, she solemnly said: ‘Now, my son, flying is a very dangerous occupation. Promise me one thing: always fly your aeroplane very low and very slow.’

Panikkar’s point was that technology has to run at its own rhythms and speed. These can disrupt the rhythms of human being. A fine literary contrast that demonstrates this is between chapter XLVII of Thomas Hardy’s *Tess of the d’Urbervilles* and Part 8 of Leo Tolstoy’s *Anna Karenina.*

Both are scenes of the harvest. Hardy’s Tess has her spirit depleted by soul-destroying labour. A ruined woman, she finds herself forced to keep pace with the rhythm of a new-fangled steam-driven
threshing machine operated by 'an engineer'. This man was 'in the agricultural world, but not of it' because 'he served fire and smoke.' In contrast, says Hardy of the English peasantry, 'these denizens of the fields served vegetation, weather, frost, and sun.'

In comparison, Tolstoy's Levin has his soul restored by joining in the harvest. He ends up returning to 'the very holy of holies of the people, the depths of the country' to participate in the harvest's swing of scythes as he asks himself the existential questions: 'What am I? And where am I? And why am I here?' A peasant tells him that there are two kinds of men: 'One man just lives for his own needs... just stuffs his belly.' The other kind 'lives for the soul. He remembers God.'

To repeat. The question concerning technology is: What does it serve? Does it serve the rhythms of the soul, the Rhythm of Being as Panikkar called his Gifford Lectures on the 'dwelling of the divine'? Or does it serve, both metaphorically and quite literally in Tess's case, 'fire and smoke'?

The parable of Ulrich's doorknob
A right relationship towards technology should cultivate empathy. I saw this demonstrated by Dr Ulrich Loening, my boss when I taught at the Centre for Human Ecology while it was in Edinburgh University. There was an awkward door handle. The students were jiggling it around and rattling the screws. (No wonder I've learned to keep some rawlplugs in my Useful Bag!) Ul heard the noise, came along, and stopped them. 'Look!' he said, in his ever-kindly teaching way. 'Try to develop a feel for all things, for the ecology of how they fit together.'

He took the doorknob in his hand, sensitively twitched it this way and that to gauge the way it wanted to go, and obligingly the latch clicked open. This is what Pirsig described as 'the mechanic's feel', an aspect of Quality that 'comes from a deep inner kinaesthetic feeling for the elasticity of materials.' Ul knew this because he taught us human ecology after the manner of Aldo Leopold: 'A thing is right when it tends to preserve the integrity, stability and beauty of the biotic community. It is wrong when it tends otherwise.' That's the rhythm of being. There's the essence of the answer to the question: What does it serve?

Ivan Illich said much the same in his late teachings. In his Schumacher Lecture, The Wisdom of Leopold Kohr, delivered at
Yale in 1994, he spoke of *proportionality* as the essence of right relationships. ‘The most radical ecological policy proposals grope toward a recovery of proportionality.’ For Illich, proportionality echoes the patterning of divine reality, just as in Taoist philosophy, the *li* – as in the grain of wood or the ripple of muscle fibres – echoes the pattern of the Tao, harmony between nature and the cosmic order.

In his valedictory reflections, published as *The Rivers North of the Future*, Illich viewed proportionality as profoundly grounded in the Parable of the Good Samaritan. Thus, ‘When they ask Jesus, *Who is my neighbour?* he answers, *He to whom you as a free human being establish your personal proportionality by turning to him in love, and inviting him to the mutuality of love which one usually calls friendship.*’

Such friendship, being based on right relationship, implies the exercise of *areté* – Pirsig’s Quality – as nothing less than a spiritual practice in relation to the tools with which we intermediate many of our relationships. The tools that we use, and how we hold and apply them, impact on our human beingness. In recognition of this observation, Illich concluded his book, *Tools for Conviviality*, with these striking words:

> Defence of conviviality is possible only if undertaken by the people with tools they control. Imperialist mercenaries can poison or maim but never conquer a people who have chosen to set boundaries to their tools for the sake of conviviality.

**Tools for conviviality**

So, finally, to the task that we face in our times. As I write, Steve Wozniak, the co-founder of Apple, is in the news for saying that, in the future, robots will keep us as pets because they’ll be smarter than us, but ‘They’re going to help us. We’re at least the gods originally.’ Meanwhile, the hardware chain B&Q is closing many of its stores because people are losing their feel for tools, and the Scouting Association has decided that a child no longer needs to understand how to handle a knife. In consequence, reported the *Guardian*:

> ... out go wood-whittling, blacksmithery and other old-school notions of what young people ought to be doing to
improve their characters and in come some far more up-to-date ideas covering computer whizzery, disability awareness, understanding global issues, photography and helping out in food banks and other community-based projects.

Well, fine. But our experience at the GalGael Trust in Govan, Glasgow, where some of the most broken people in the community help to build boats, is that when you give a person a length of timber and a razor-sharp chisel – when you show them how to work the one and maintain the other – all manner of Quality, of conviviality, emerges from the li of muscle and wood’s grain. It is contact with reality that makes us human. Not every essence can be taken apart as a ‘social construct’. Even Derrida, the arch postmodernist, conceded in the end that, ‘Justice in itself, if such a thing exists ... is not deconstructible.’

How can we restore, or perhaps (like love) discover for the very first time, what the Hebridean poet, Iain Crichton Smith, called ‘the feeling intelligence’: that of ‘real people in a real place’ on a shared journey that leads ‘towards the human’?

In January, I took my inflatable canoe by taxi down to Renfrew to sail and paddle back up the Clyde to Govan. As I pumped it up, a ferrymen was working on his engine on the slipway. I wandered over to enquire about the tides. On hearing the Hebridean lilt in his accent, I asked where he was from.

‘Eriskay,’ he said, proudly.

‘Leurbost,’ I said.

Downing tools, he rolled a fag, eyed up my boat, then with a nod towards his own square-set aluminium landing craft, announced: ‘The trouble with that thing, is that you can’t feel it in the water.

‘With a proper boat,’ he added, nodding this time, to my surprise, towards my length of plastic and nylon that had at least the right curves, ‘no matter how small the boat, you can feel the motion of the water, you can feel the way she moves, the way she flexes with the waves.’

‘When first did you put out to sea?’ I asked.

‘With my father ...’ he answered. ‘You see, my father didn’t believe in engines. Even in the early 1960s, he’d take me out, far out, with just the oars and sail.

‘He’d make me sit beside him on the thwart. Then he’d put an arm round me. He’d make me put my arm round him. When the
boat moved, he moved. When he moved, I moved too. That’s the way I learned to move with boat and waves.’

And I thought to myself: ‘Aye, and that’s the way your father moved you to be who you’ve become.’

Several months later, the gift that I bought for my first-born grandchild was what I dubbed ‘the water pram’ – an inflatable canoe. Catriona, my daughter, and her husband Kevin live in York. With my rescue canoe to hand and all due precautions to appease the grandmothers, we made our maiden voyage up the willow-lined banks of the Ouse.
Finley was just seven weeks old; but, ‘You see, my grandfather didn’t believe in engines...’

Every time I go back to the isles, a few more of the old folks have died off. It’s now we who must pass on conviviality, lest the tools rust. From time to time I get letters from the younger generation, wondering how to reclaim life amidst their world today. I think about the ferry man from Eriskay and many others in his kind of lineage. We who have been touched by their blessing; we too now hold the touch of blessing. That, too, is in the Useful Bag, and as an article in CoEvolution Quarterly once put it, ‘the gift must always move.’

A young woman who helps run a café and bicycle repair coop in Inverness is one of those who wrote to me. Her roots were in South Uist. She’d largely lost them, yet she felt the pulling current of the ‘carrying stream’ that is a living culture.

I wrote back and, with her blessing, share these words for all who search for roots, wherever. All who, as Dougie Strang calls his Dark Mountain events, are ‘carrying the fire’:

**Child of the Uists**
*(for Laura Nicolson)*

Remember –
child of the Uists
that you
are one
of the Ancient Ones
whose flame
will not go out
as long
as you
remain
awake
Re-member!