

Caving: Risk Management: Dreams and Visions

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SUMMARY

In 1956 I had the honour in Adelaide to be elected the first President of the Australian Speleological Federation (ASF). Today I have the honour and delight of opening the 24th Biennial Conference of the ASF.

The theme title of this conference is "Under WAY", and how right it is. The program is of staggering and wonderful variety, the mixture that speleology should be, of science and exploration, of delight and joy.

The title of my opening address is deliberately provocative – "Caving: Risk Management: Dreams and Visions". I take the liberty of that franchise of Presidency loaned to me in 1956 to suggest a few thoughts you might bear in mind later in this Conference.

I will also take the opportunity to correct some of the many errors in the literature about me being lost for 3 days in the East Deep Creek Cave at Yarrangobilly in 1953.

I went into the cave with my long-time caving mate, Fred Stewart, about 2pm Monday, 14th December, 1953 for a brief reconnaissance, just as we had done in the West Deep Creek Cave shortly beforehand. We wanted to choose one cave and plan full exploration for the next day.

We quickly separated, as we usually did to double our speed of probing such unknown, 3-dimensional mazes of rock, where the roof had fallen in again and again over millennia. Fred came out again after about half an hour, having found only more rocks. But I found a fabulous, wondrous white and glittering cavern below the maze of rocks. Entranced, I explored it a little, but then could not find the right slots in the maze to rejoin Fred. I did not even know if Fred had got out. So I had to try to find my own way out, listening for the underground creek and perhaps even a yell from Fred. For all but about 8 hours of the next three days, I was exploring in the dark, and I will describe my techniques and feelings. I emerged with one of the half dozen search parties at 5.30 pm on Thursday, 17th December.

The Yarrangobilly incident made headlines in the Eastern States for a few days, and may have inspired more general Australian interest in speleology. I went back to the East Deep Creek Cave twice more, and it has now been more extensively explored.

One of the later sessions is on risk management. Many of my scientific discoveries during my half century of science occurred because I was politically incorrect. I challenged "accepted" views. In fact, almost any "discovery" must challenge accepted views. There is a vital lesson here for cave explorers dealing with risk management. Fred and I pioneered chasing "foul air" in caves, and with Dennis Bourke and Ben Nurse, pioneered in very, very primitive high-risk underwater exploration. Many of the most exciting discoveries, provided one survives, involve political incorrectness, serendipity, and both dreams and visions, as in Apollo work.

I revisit that old Biblical forecast about old men dreaming dreams, and young men seeing visions. I urge you all, no matter what age or sex, to be as young men and see visions as the most vital need of all speleologists. So I have great delight in opening this 24th Biennial Conference by urging you to get "Under WAY", and turn more visions into dreams, so that in turn you can continue to inspire new and original visions amongst those who follow over the next 50 years.

Official Opening

THE GENERATION GAPS

I started caving in 1951 in my first year at the University of Sydney, and ended really active caving in 1958, when I went to the Antarctic. So for this audience of active cavers, I first have to convince you that I know that times have changed, and that there are generation gaps.

For example, Fred Stewart and I were very poor and students, without a car for our first 4 years of caving. So it was hitch-hiking plus walking to find a cave. This meant that food, camping and caving supplies were limited to what you could carry, say, 30 kilometres or so through the bush. Not for us your modern 4-wheel drive, air-conditioned Range Rovers.

So in the midst of scarcity of resources, we developed our own code of ethics, unwritten. These days some United Nations group would have hundreds of conferences costing billions of dollars and call it all "sustainability. Indeed, the word "development" is now so politically incorrect that one cannot speak of "sustainable development", the catch phrase of the Rio Earth Summit only 10 years ago.

Take care that caving bodies do not over-regulate. Our code of ethics was commonsense.

For example, one day we would have only one hard-boiled egg to share for lunch. The fellow who cut the egg then put one piece in each hand behind his back. The other fellow chose "which hand?". If the cutter had not cut exactly in half, he might get more or he might get less. If he got more, his mate got less. So obviously we automatically cut the egg in half. The "hands behind the back" routine was our only self-regulated control mechanism, much more efficient than having salaried inspectors and legislated regulations. And no-one could ever cut a hard-boiled egg EXACTLY in half, depending on which end the yellow bit had slid to.

In our day, this was a logical way of risk management. Commonsense is now out of date, the victim of the "me" generation, Dr Spock outputs, and decades of plenty. Australia and private organisations seem overfond of regulatory controls. But intellectually, if folk are sensitive enough, you can detect or make a simple bridge over generation gaps that makes sense, can provide the best of both "sides", old and new, and offers a new possible hope for the future.

My favourite example of this kind of generation gap spans from my grandmother Nana Hoban to my granddaughter Steffie. Obviously, I am in the middle.

One night in 1957 I wheeled Grandma Hoban out to the backyard of our home in Sydney and tried to show her weary eyes and mind the magic, man-made star called Sputnik 1 that whizzed on schedule across the star-pricked velvet night she had seen unchanged for 87 years. Nana grew up in Tamworth, read by the light of one candle, and left school aged 12 to become immediately a country teacher, until she married a bossy farmer at 18 or so. Despite my exultation at Sputnik 1, she just shook her head and said "It's not right. It's not right."

About 40 years later, I was carrying my half-asleep eldest grandchild, Steffie, aged 5, out to her mother's car after a family dinner. It was the usual clear Perth night. The full moon was low on the horizon, so full and bright you felt you could reach out and touch it. We said our usual "Hello, Mister Moon", as I had indoctrinated first our children then their children.

It is always good, I told them all, to have a friend in the sky, on whom you could rely when the rest of society was behaving irrationally. The first word one grandbaby could say was "moon", pointing a chubby arm up, one daughter assured me once.

This night I was feeling nostalgic and whispered to little Steffie, all warm and snug in my arms:
"You know, Steffie, Grandpa has six experiments up there on Old Man Moon."

My eldest grandchild merely said softly and sleepily:
"That's nice, Grandpa",

and, becoming alert, slid out of my arms to play with Algernon, the cat.

Official Opening

DREAMS AND VISIONS

For several years, I felt hurt and sorry for myself for such a “put-down” response from my granddaughter Steffie to my wonderful achievements - 6 experiments on the moon. I wanted continued congratulations, not playing with the bloody cat.

Then one night a few years ago I gave an after-dinner talk to a Melbourne annual conference of about 300 engineers. Chatting to young and old as we wandered around before dinner, I realised that Steffie was correct. She did not mind me having dreams of past achievements. She thought that was “nice”, using the word lovingly.

In Joel, chapter 3, verse 14, is one of my favourite quotations, which has very deep significance and which, unfortunately, is too often ignored by Australians, young and old and in-between like me.

*Your old men shall dream dreams,
Your young men shall see visions.*

The same verse begins

Your sons and your daughters shall prophesy

but with the present quality of the media plus political correctness in Australia only the frightening prophecies - the “bad news” - will be published, while the prophecies of joy, other than sexual delights, are ignored. So I will focus here only on dreams and visions, not prophecies.

With the wonderful clarity and uncluttered purity of a young child's mind, Steffie had instinctively known that what she wanted and was most interested in was her **Future, not the Past**. I had done only what grandparents are expected to do, prepare for the future. She wanted new visions before her. She wanted to come to know how to create HER visions and to fulfill them so that she and other grandchildren could have their own dreams. She wanted, instinctively but unvoiced, to then add her dreams to my old ones and pass them all one to her own grandchildren, to help them see new visions and enjoy them with their own grandchildren.

Old engineers in my Melbourne audience spoke mostly about the past, the bridges they had built, the roads, and machines which are now part of our present reality. They wanted thanks and praise, but only old engineers praise old engineers. Many of them had leading roles in the Snowy Mountain Scheme, whose 50th anniversary we had celebrated a few weeks earlier. The Snowy Scheme transformed Australian demography and built our multicultural nation. It was built largely by “Displaced Persons”, men who had been shooting and bombing each other only a few years earlier in Europe and Russia. Would the Snowy Scheme be approved now? I think not.

Many of the old engineers at this dinner were forgetting the youthful vigour and often political incorrectness with which they had turned their old Visions into realities, now become dreams. Many had no new vision at all, in the true sense. Many were suspicious of new visions, and wary of new ways of solving old problems.

On the other side of the generation gap, the young engineers might have some visions. But many had little experience or lateral thinking as to how to turn those visions into reality, which in turn could become their own fulfilled dreams in the future.

So what each of us and Australia as a whole needs so desperately is a multi-generational synergy, a combination of dreams and visions, a sympathetic understanding that bridges across all generation gaps.

Speleology is an ideal opportunity to achieve such synergies, as you will hear in later presentations.

It is a staggering achievement that a conference of such quality will be held nearly half a century after a few of us gathered in Adelaide in 1956 for the first big Nullarbor trip and the creation of the ASF.

Official Opening

Since Joe Jennings lay on his back in a Nullarbor cave in 1956 and gazed for hours at the roof, the ASF has bridged over 30,000 years of Australian history and pre-history. Since Henry Fairlie-Cunningham set fire to his flame-throwing flashlight to create bright, blinding mushroom clouds of magnesium oxide, the real Diprotodon has revealed more real bones that walked and lived and loved maybe 10,000 Diprotodon-generations ago.

I congratulate heartily the organisers and contributors, and indeed the whole assembly. CONGRATULATIONS to those who know they deserve them.

RISK MANAGEMENT

I notice the special full session on risk management. I plead with ASF organisations not to become as overly zealous and regulatory as governments are, even though I recognise the problems of insurance and litigation. Way back in the less-litigious days of the early 1950s, I investigated getting insurance cover for speleos. The best policy I could get was at a premium of 1 pound (\$2) per person per weekend, for a recoup of \$100 per death per person. I did not investigate the rates for broken arms. We never took out caving insurance, but simply accepted responsibility for ourselves. There was one particular SUSS character, however, overly fond of gelignite for “clearing” squeezeholds, and if he was going to Jenolan, I went to Bungonia.

Risk management, such as the national policy of the “precautionary principle” foolishly but currently applied by Federal and State legislation is a killer disease, an enervation of epidemic proportions, which is politically correct. Only a very few dare speak about it in a commonsense or even technically accurate manner, drawing attention to the economic caveat on its application placed on it by the United Nations Framework Convention on Climate Change, but omitted in Australian laws and policies. I try, but get little support. Younger scientists, seeking to become established, know that the bulk of government grants are given only to true believers, politically correct, so that rigorous and vigorous scientific debates are not encouraged.

Quite separately, there are today many and varied scandals about failures in risk management. There are issues of corporate governance, which is also risk management for massive billions of dollars in events like Enron, HIH and many others. On a smaller scale, lifetime smokers sue tobacco companies. There is a Sydney surfer who found that the naughty sea had moved a sand bar so that when he dived in, he broke his neck. Unable to sue the sea, he sued the local council. There is even a movie about the man who sued God.

A tourist is taken by a crocodile in the Kimberley, and the Canberra-based Minister promises to erect a warning sign everywhere in Australia where a crocodile is or might be. Obviously he did not consult Treasury. Even so, recently, a crocodile who could not read killed a tourist who also could not read and walked past such an official warning sign into the water.

Who has a “duty of care” when you enter an unexplored cave these days? I’m glad that my caving was done when such a question was never even thought about.

The most magnificent example of risk management I ever encountered was with Apollo 13. I had two experiments on Apollo 13 to be placed on the moon, but they burned up over the Pacific when the landing on the moon was aborted. I was in Mission Control in Houston at the time. The moon was at full light, and as I walked through the clear but humid night back to my rented apartment, I knew that somewhere between me and the moon were three desperate but skilful explorers.

The three days of frantic and desperate actions at Mission Control and in the spacecraft inevitably brought recollections of my three days lost in the dark at Yarrangobilly. One stark contrast was that almost everybody in the world knew the position of the Apollo 13 astronauts, and the Mission Control group and support groups worldwide were desperately but knowledgeably working for their rescue. In my case at Yarrangobilly, I did not know if Fred had got out of the cave. If he had not, nobody would be searching for us for many many days, if ever, so I had to assume that nobody knew I was lost, and therefore I had to try to get out by myself.

Official Opening

I assure you, there is an immense difference between being lost yet knowing that people are trying to help, and being lost not knowing if anybody is looking for you.

If you want to understand risk management then I recommend you see the movie of Apollo 13. It could not hope to cover all the contingencies, but it does show the improvisation which went far beyond any of the vast and complex risk management plans that already existed. It is the only movie that remains a thriller even though you already know how it ends.

Risk management, and people who sue anybody they can for injuries resulting from their own actions, taken under their own free will, must recognise that accidents can happen, and nature is unpredictably variable. The Tourism Minister who wanted signs warning against crocodiles did not realise there would be a crocodile who could not read or a tourist or tourist guide who would not read. There are many other more substantial reasons requiring a review and overhaul of insurance and damages litigation. Accidents happen. Accidents happen most often in the home. But a risk-free world would be a sad and dreary place.

I can only hope that the threatened species known as commonsense is a powerful voice for change. But my hope is not strong, even in this wondrous country where once self-sufficiency was routine, bolstered by unfettered mateship being the unwritten law.

For example, it pains me to see ant-like lines of people, linked together and dressed in uniforms just as if they were convicts, paying to climb the Sydney Harbour Bridge. Their ears are bombarded by a spruiking overseer, their eyes directed on command, they cannot take photos, their forced march moves to a clock-driven turnstyle, and they move when given the command to move. All in the name of risk management and risks of litigation. When Fred Stewart and I climbed to the top of the Harbour Bridge up to the red light back in the 1950s, we did so at midnight and it was great fun. Nobody bothered our free spirits at all.

So we stood there in the wind and wonder of the night, not talking but immersed deep inside ourselves at one with the wonders of the sky, the city and the harbour, while the busy cars and trains and ferries did their own things far below, in a different universe.

THE YARRANGOBILLY INCIDENT

Some may wonder how I can speak about risk management after myself getting lost in a cave for 3 days, alone and ill-equipped. I will leave you to judge.

But my main reason for discussing "The Yarrangobilly Incident" (O'Brien 1955, 1958), is that only recently after I began collecting material for an autobiography did I realise how much incorrect and nonsensical writing had been published on the subject by others in the caving literature. Most was hearsay third-hand or worse. I have received some apologies, but I heard yet another myth in mid-December to the effect that the ASF was established mainly to "prevent" such incidents. That is absolute nonsense.

Indeed, this is one of the more dangerous bits of nonsense for caving in Australia, because it could lead to over-regulation zealotry. The ASF was created for reasons of sharing information, talents and comradeship, not regulations. Our care for the environment was innate and an essential and automatic instinct. There were a few exceptions, but not many, and they tended to leave the scene quite quickly.

The Yarrangobilly incident did excite nationwide interest amongst the media, but as I recall, we only started the idea of a national organisation a year or two later, when more groups we had not known about wrote to SUSS.

"The Yarrangobilly incident" was simply that I got lost in the previously unexplored and wild East Deep Creek Cave at Yarrangobilly, near the Snowy Mountains, for about 3 days, without light except for the first 8 or perhaps 10 hours. Estimates of the numbers of people in the half dozen search parties in the cave and bush varied between about 35 and 50, with up to about 5 groups in the cave.

Official Opening



***Fred Stewart during the
Yarrangobilly incident***

My long-time good mate Fred Stewart and I had often explored Yarrangobilly on many trips, discovering and exploring many caves previously unknown. We mapped a few large ones and made some fluorescein tests of the Eagles' Nest Creek. We had to hitch-hike from Sydney and walk in, so supplies were always critical. It could get very cold, but we were young and fit.

On our trip in December, 1953, over the first day or so we had completed our mapping of one of the Eagles' Nest Caves, down near the tourist Caves House. Then we moved camp up to the plateau where little or nothing had been explored, although Trickett had mapped and named a few cave entrances.

We left most of our gear at the new camp, but wanted to make a quick reconnoitre of both the West and the East Deep Creek Caves, to see which one was worth doing a proper exploration the next day. Neither had ever been explored.

We were travelling lightly. Normally each of us carried two lights, a carbide hand-lamp to give a wide hemisphere of diffuse light and a helmet torch to provide a searchlight beam of stronger, more concentrated light but covering much less area. But for quick reconnoitres, we were as usual anxious to conserve our supplies. So that afternoon I wore a black beret and carried only a carbide lamp. Fred wore his helmet and its torch, but carried no carbide lamp. We wore no watches, and rarely did in caves, because they were too expensive to risk, scrambling in rocks and water.

We spent about half an hour in a quick look in the West Deep Creek Cave. Then we walked through the lovely but rugged Yarrangobilly bush to East Deep Creek, where it splashed steeply and scrambled among the boulders to disappear underground. We separated to explore, as we often did, to cover twice the volume of tumbled rocks.

We used a prismatic compass while mapping caves, but one would obviously be useless in the tumbled rock mazes of either Deep Creek cave.

Some people seem to find it strange that Fred and I were separating and rejoining, again and again, but that is the way we explored in a maze of rocks, searching for a break through to a cavern. Besides, even in a cave with caverns and tunnels and not merely a 3-dimensional maze of rocks, you have to get lost to be an explorer. It is getting unlost that is the real trick. Rather like science.

In the East Deep Creek, down through the maze of fallen rocks that made an entrance, I found a way into a great big new and lovely cavern. I was entranced at the pure white crystals glittering in my lamp light, but when I climbed back up into the maze of cold, muddy rocks, I could not find the critically small entry way out again. I was lost, quite thoroughly.

Fred got out first after about half an hour, after finding only more of the maze of rocks, and no cavern. He went back to look for me briefly before going a few kilometres to Caves House for help, leaving me a note which I still have. My gratitude for his actions then and later have (literally) my undying gratitude.

I emerged about 75 hours later with one of the five or so search parties at 5.30 pm on Thursday, 17 December. For all but the first 8 hours or so, I tried to find my way out in the dark, listening for the East Deep Creek or any running water. The problem was that I did not know if Fred had got out. Hence I did not know if anyone was looking for me.

Official Opening

There is an infinite difference between being lost yet being comforted by knowing for certain that people are searching for you, and being lost not knowing.

In the first you can have hope in others. You are not really lost, just temporarily misplaced.

In the second, you have only yourself and what you are.

You have only yourself and your memories. Fortunately, I knew a fair amount of poetry, and books I had already read, whose fragments in memory saved my sanity. I also knew a moderate amount of “good” music, which helped. I neither spoke the poetry nor sang the melodies, because I quickly found that any such noise only emphasised and exaggerated my being alone.

In the cave the essential truth I found was that ultimately each individual is absolutely alone. I was as alone as is possible to be on this planet because I did not know if anyone was searching for me.

When I accepted that I was lost and my yelling produced no response from Fred, I turned the carbide lamp very low. I decided it was better to have a dim light for a longer time than a bright light for a short time. There is no right or wrong general answer as to whether this was sensible.

So I was lost in the vast underground jungle of rocks, caverns and twisting passages, and glorious sparkling limestone formations of what we called the East Deep Creek Cave. The name of the unexplored cave and the location of its entrance were all that was known as that day began. Nobody had ever reported going into the Cave.

My older brother Terry has never been in a wild cave, yet 40 years later he gave the most vivid and evocative description of the wilderness of the East Deep Creek cave.

There were half a dozen search parties and about 35 to 40 men searching the bloody place for almost 3 days, and they could never even find each other except at the bloody entrance.



I spent three days alone in that cold place where there is no day or night but only eternal darkness. My carbide lamp light lasted for the first six or eight hours, or maybe ten. I turned its water flow down until there was a mere bubble of light. I walked slowly over and around big rocks. I came to a sheer drop, and hooked the lamp in the roof while I climbed down. Even with two hands free for climbing, I lost my grip and fell about 10 feet, on my bum.

I could not climb back or reach my lamp again, so I took off my boilersuit to swing it by a trouser leg and knock the lamp down. When I hit the lamp, the bubble of light burst but the lamp stayed in place, in the dark, where it hangs to this day, despite my later trips to find it.

I was in total darkness. I knew there was a 10-foot cliff on one side. Was there another 10-foot drop nearby, or perhaps even 30-foot, unseeable?

Earlier and deeper down I had discovered beautiful white crystal caverns and pure, still pools so clear you did not know they existed until you stepped in them. No human had seen these beauties before. That lower part of the cave had some order and structure.

Where I was really lost it had become a wild cave. In many parts it was totally disordered.

Over thousands of years the roof had fallen again and again, producing many tilted mezzanines of boulders and rocks of all sizes. The cave was a multi-story three-dimensional maze of rocks. If you went around one side of a big rock, you were likely to reach a different location than if you went around the other side, or over the top, or wriggled underneath if there was room.

Official Opening

I had no food and no companion. I did not know whether Fred had managed to get out so that somebody else might know I was lost and they might come searching. I yelled out from time to time, but no answer came. My calls were deadened as they thudded into the tangled rocks and muddy cavern. There were no echoes in that cave, only sullen rocks and mud.

I listened for the whisper of the underground creek that might lead me to the surface and the lovely bright-lit sky.

I held my breath from time to time, so that its noise would not prevent me hearing the waters of that creek, or even perhaps a faint call from Fred, that very precious “Coo-eee” of the Aussie bush. It is a bit tricky holding your breath while your entire body is shivering violently. The temperature was in the low 40's Fahrenheit, although it was a brisk Snowy Mountains summer outside in the sun, and frosty at night. Shivering was a whole-of-body experience, draining my energy even while I rested, and the muddy rock was an eternity of chilling cold.

I heard my heart beat. How I wished my heartbeat was not so loud. It doesn't go “pitter pat” as I had read in books. My heart went “whoosp whoosp”, an unwanted background noise as I listened in the tomb-like silence of that cave.

When I sat to listen after I had given a couple of yells, I would first hold my breath, then hold my boilersuit out free of my chest, to reduce the effect of my heart pulsing the fabric. My sight was useless, but I still had hearing.

In the eternal dark and eternal stillness, I was alone with the Bogeyman, and he certainly was no help. When my breath was still, and there was no sound but my beating heart, the Bogeyman came near, on every side. He came closer after I had finished calling out.

In my older years, I often read that youth of 19 years of age, as I was, commonly feel that they are invulnerable, with eternal life. I assure you that was certainly not the case for me. I had to try to find my own way out. Cave exploration the hard way, in total, absolute darkness and isolation.

I had to move, a non-trivial problem in that jungle of rocks, tumbled together in three-dimensional chaos. There were big holes of empty air between big boulders, and falling in the dark is not funny. Falling in the light, as I had just done, was not funny either.

So moving had to be done while sitting down and sliding. Many years later I called the technique “sitz-bumming” , when I helped my wife or little children come down a steep rock face using 4 or 5-point contact with solid earth, 2 hands, 2 feet and the bum.

At Yarrangobilly I chose sitz-bumming, because there was no floor but a lattice of rocks and nasty holes between rocks, sometimes very deep holes. If I stood up and walked in the dark, and one foot went down a drop, the rest would likely follow. So I did not stand up too often.

Instead, I sat and reached around me to find a loose rock. When I could feel one small enough to hold, I would throw it in a direction of choice. My only compass in the total darkness was where my legs were pointing. If it took a few seconds before I heard the rock hit the ground, I would not be going in that empty direction. I would feel around for yet another rock and then try yet another direction.

After all, I knew my physics and the equation for calculating how deep a hole was by counting the number of seconds it took a falling rock to hit the ground. In the first second a rock falls 16 feet, about 5 metres, a nasty enough fall. Two seconds would mean a fall of about 64 feet, or 20 metres, a seriously nasty, crippling or fatal fall onto rocks, unless I bounced a few times on the way down. Definitely not nice.

The sounds I really did not like at all were a series of sounds, like a rock bouncing down from one boulder through a new hole on to another boulder.

Official Opening

Thrown rocks are very insensitive substitutes for eyes. Imagination makes holes in the darkness.

Progress was slow. Progress was also not measurable because in the darkness a pair of hands was not sufficient to identify a landmark, or even find it again. I sitz-bummed on, feet always first, with my clinkered boots searching preferably for horizontal, or an upwards slope, room to advance.

For one long time, after perhaps 24 hours, maybe twice that, I sitz-bummed myself in the total darkness slowly into a sloping tunnel, where the roof got lower and lower, and the sides closer and closer. My light had gone out long before. I had also used up the few matches I had kept dry under my beret. With the last match I had set alight the tassel of my cap, and it flared most wondrously but so bright it blinded me from seeing anything useful. Now I was in eternal darkness.

Finally the roof came so low that I had to lie flat on my back, feet first on a moderate downward slope that went I knew not where. I was now stuck in a tunnel, sloping down. I wanted to go up, not down.

In that tunnel was the only time in about 74 hours when despair captured me totally, because I grew to feel it was my tomb. Lying on my back, I could reach by touch the walls to the left, to the right and overhead. The clinkered heels of my boots were dug in, scratching at the slope to stop me sliding further down into the black unknown. I shivered noisily, desperately cold, with no kind of warmth except shivering.

I had no way to learn how far that tunnelled tomb stretched down beyond my boots, because I had no room to sit up or even twist and throw a stone beyond them.

So when I did manage to find a small loose rock I did not throw it. Instead I scratched a very short last will and testament in the muddy rock roof in easy reach just a few inches above my face. It was my first last will, and the shortest.

Writing with a rock in the dark focussed my mind to construct a will with as few letters as possible. The powerful and beautiful brevity of the King James Bible or Shakespeare's plays and sonnets will never be achieved again, since megahertz word processors replaced the quill and papyrus, or a rock on a muddy cave roof.

How long I stayed in that tube I cannot know, my whole body shivering almost rattling in pain from the cold. But then I decided that I would not die just there and then. I wriggled back upwards, using elbows and heels of boots. I had more black space for my body, and more unspoken poetry and unsung music to refresh my mind.

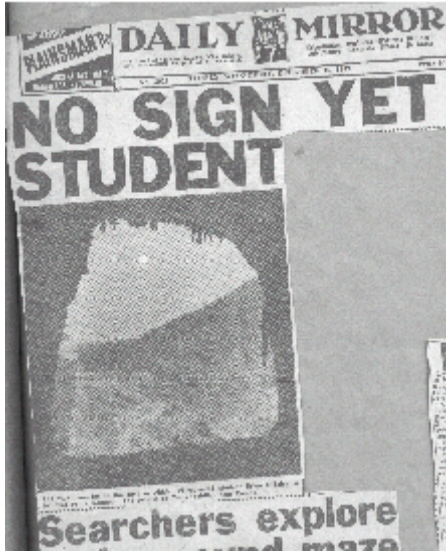
More sitzbumming. An occasional call out into the darkness, just in case someone was searching. An occasional pause to hold my breath and listen for that blessed creek, just in case no-one was searching.

Scratching a will was also quite silly of course. It might even be considered black humour.

Even if my body had been found, nobody would have thought to look above it, even after my body had been dragged out of whatever sort of tunnel I was in. Nor would anyone think to decipher crude and ragged scratches of each letter in the rock and the mud, written in total blackness without the power to make any corrections or connections.

But I suppose it was the thought of love that counted, as it does so often. I also suspect that it was the physical action of facing the finality of that last will and testament which caused me to say when I finished scratching, "Bugger it, I'm not staying here, and I won't die yet."

So I kept moving and then stopping, moving and stopping. I stopped to listen for that nice little creek that leads up to that bloody sunlight. I moved to listen from a fresh spot.

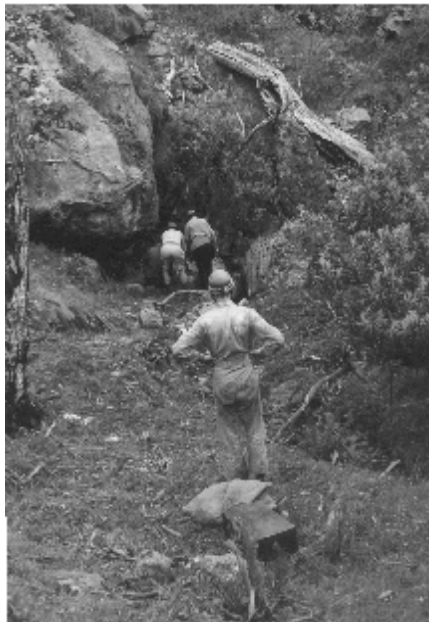


***Mouth of unknown cave mouth, where
The Daily Mirror reported I was lost***

for memory. My eyes had once read books and poetry. My ears had once heard wondrous melodies. Now my memory read and listened again, and again. But I did not speak or sing aloud.

Mixed with the awkward sitzbumming, I also knew throughout that, down somewhere below me, free of the jumbled rocks, was a magical mix of purest white cascading crystals and pools of still water so clear you could not see it unless you stepped in it with muddy boots. And I had discovered it all. I, just Me.

So, in the dark, I slid further on my bum, picking up and throwing a rock in the direction my legs were pointing as my only compass.



Mouth of the real East Deep Creek Cave

The only humour I found in the cave was in my mind. It was in the poetry that saved my sanity, my beloved Belloc, Keats, T.S.Eliot and Macavity the Cat, (long before "Cats" became a fashionable musical), even Ogden Nash and his tree. Other times I conjured up companions from Shakespeare and Chesterton and all those like Winnie the Pooh who have problems. "A Bear likes honey. Buzz, buzz, buzz. I wonder why he does." Beauty helped. Images of the Aussie bush just outside, of campfire smoke floating up to the starry roof of the cathedral of tall night time trees in moonlight.

I wanted the Southern Cross, and the two Centauri. Even Omar Khayyam and "Awake, for Morning in the Bowl of Night has flung the Stone that Put the Stars to Flight" - not bloody likely here.

My eyes had nothing to see. My ears heard only my own life elements. My physical senses were useless or dulled by the freezing cold. But my mind was intensely active. Alone, I was not lonely. Thank God

If there was silence for a second or two, I swivelled my legs to a new direction, and threw another rock, and so on. It made for slow progress, with no landmarks to mark real progress. No tunnels, no formations, and no features recognisable by touch alone.

A real compass would have been useless in the top 3-dimensional maze of rocks where the roof had fallen in over previous millennia. Fred, Laurie Bishop and I went back later to try to find my lamp. We took 400 feet (about 130 metres) of string to about where I thought the lamp might be. After scrambling and wriggling through and up and down the rocks, we had laid out all the 400 feet of string. So I left Laurie at the end of the string and explored further within earshot, with no success. Returning to Laurie, we then spent about an hour looking for the string, because Laurie had wandered just a few metres. It was a real wild cave in that area, with rocks of all sizes jumbled in a 3-dimensional maze, with plenty of gaps of unknown depth between many of them.



The successful rescue party

**Media interest switched underground
away from the Queen's tour!**

(Photo by courtesy of the Sydney Daily Telegraph)

The search party of five that found me consisted of my old mate Peter MacGregor of SUSS, Mr Finney of the NSW Tourism Bureau, and three members of the Canberra Alpine Club, Jack Leslie, Dick Pickering and Jim Webb.

They had laid a paper trail "to stop ourselves getting lost", but we all got lost again on the way out. We did not stay lost. The difference this time was that we all had lights, and we stayed together. We were not exploring, simply getting out. I helped Mr Finney over the occasional awkward bit.



**Brian with one of the Snowy
Mountain horsemen who
helped in the search**

I was found about 900 feet into the cave. We took well over an hour to cover those 900 feet, that being the nature of the East Deep Creek Cave.

I apologised for being a nuisance, because about 70 people had been searching. But the Snowy bushmen were used to accidents.

One very fine bloke gave me a big chunk of his wife's fruit cake, lovely and sticky and very heavy. He poured me an enamelled tin mug of black tea thick with sugar.

Then he gave me a ride on the back of his horse to get up to the road and a car to Caves House and my family. I had not realised how weak I was until I could not swing my leg over the horse's back. I could get my foot into a stirrup, but not swing my leg over. Wordlessly, we shook hands, he gave me a hoist, and I rejoined the world.

I've been back to the East Deep Creek Cave a few times, once to show my then-fiancé Avril the crystal cavern. Since she has now been my wife for 43 years or so, I guess there was no long-term damage. My lamp is still there, so far as I know.

Reverting to the issue of risk management in a brief analysis of the Yarrangobilly incident, clearly we were equipped for what we intended, but were tired at the end of the university exam period and our previous caving and walking.

Official Opening

Fred was bigger and stronger than me, but there is little point to such personal comparisons. The rocks were rocks and various distances apart, but all was fairly straight-forward scrabbling.

We had caved as a pair for 3 or 4 years before and a few years afterwards until university absorbed us totally. The fact that I had the wide-angle but weak carbide lamp rather than Fred's strong, directional head lamp may have helped him. It certainly hindered me in looking for a way out of the top, muddy-walled cavern that met into the crystal chamber. Being effectively one handed did not help me, but there is no real "excuse" for what happened. Nor do I intend to try to offer "excuses", although I am happy at trying to analyse useful lessons.

A real fact is that we should have had a routine agreement for the first one out of any cave where we got separated to leave a note at the entrance. Fred had left one, which I still treasure. But after the first two days of searching the cave, the police and the bushmen were fairly convinced that I had got out of the cave before Fred, and got lost in the bush or fallen down another hole. The speleos and Fred knew how well I knew the Yarrangobilly plateau, and concentrated the search on the cave itself. But the intensity of their search was necessarily weakened. There was an understandable desire also, for the police and bushmen to search familiar, daylight environments.

The press delighted in the nearby limestone formation nick-named "The Tombs". Over their beers at Caves House, they speculated seriously whether Fred had murdered me and left my body in The Tombs. Fred was a quiet young man, always taciturn and with few words, which is one of the reasons we were such good mates. But he was under enormous strain, and the police were responding to the press gossip. Only my Dad's intervention prevented the speculation being given some official status. Although Dad had never met Fred before, he knew the man-boy quickly.

The press coverage was mostly atrocious, as if each reporter collected any anecdote he or she could. In fact, many articles, even headline front-page stories, read as if they were written at the bar by somebody who had not been near the correct cave. I gave no interviews, so any quotations in the press were inventions or third-hand at best.

If anyone wishes to study the facts, the first thing to do is a suggestion similar to that made by Shakespeare's Dick the Butcher: "*The first thing to do is kill all the reporters*".

CONCLUDING COMMENTS ABOUT YARRANGOBILLY

Some months after "The Incident", a perceptive (female) speleo asked me whether I was glad that I was alone or would I have preferred to have companions while I was so lost.

I immediately, and subsequently, confirmed that I was glad I had been alone, apart from the issue of having a brighter torch to try to get out.

In the dark, no matter how close the Bogeyman came, I was able to focus on my mental and physical state alone. That would have been difficult with another person or two, no matter how closely bonded and how much I trusted someone like Fred. I could not have resolved the writing of my will except through being alone. The poetry and music and my recollections had to be allowed freedom to dance and skip through my mind without necessarily verbal utterance to someone who necessarily would paint the words on a different canvas of different backgrounds and different memories. Throwing exploratory rocks in the darkness would have introduced a different dimension of danger.

If Fred and I had stayed together, we could have explored only half the volume or less. We may never have discovered the crystal palace, to draw others back.

More important for me personally, I may never have experienced such an epiphany elsewhere.

I continue to be grateful to my peers who subsequently elected me the first President of the ASF.

Official Opening

But I don't think I would recommend to any one a repeat performance, particularly not knowing if anyone was searching. Three days of exploring a wild cave in darkness is a trifle long.

To my caving mates, including the new ones I found when they found me, and to the police and local bushmen, I can never repay them for the simple gift of life.

One unexpected bonus gift was a lifelong one. Having faced an unseen Death, alone, I have never feared him since. Instead, and conversely, every new minute of life, even now 44 years later, is a bonus. Not earned, but much valued. And the world and its people are amazing and wondrous to behold. I pity those scientists who plod along in life, not finding magic and joy in their discoveries. I hope that teachers share such magic and joy with their charges.

FOUL AIR

I don't want to end on a note implying that the Yarrangobilly incident was the only magical experience or epiphany that cave exploration brought me, when I was so young and still stretching the envelope of my invincibility. So I'll conclude just with brief comments about foul air and underwater exploration in those primitive early days in the 1950s.

As you know, in some caves you can get ephemeral pockets of foul air, of excess carbon dioxide. In the fifties, most cavers who encountered foul air in a cave, and found their carbide lamps flickering out or matches refusing to light, while their own breathing became painful panting, simply turned and went somewhere else. Nothing was known in any of the Australian or international reports or books we could find. People just regarded foul air as a hazard, and left.

For Fred and me, him a medical student and me a physics student, turning from the unknown was simply not a thing we did.

Somehow, through Dennis Bourke, a much more senior medical student and SUSS member, we learned that Professor Cotton was interested in foul air. I think he was researching men's breathing gear for high-altitude balloons. Since he was famous for inventing the G-suit, or "anti-gravity" suit, that helped fast-turning Spitfire pilots in the Battle of Britain, he was a big wig at the University of Sydney.

More important, he would give Dennis who would then give us small, half-pint or so glass bottles with ground-glass stoppers. He would fill them with salt water, tightly stoppered. We would find foul air, empty out the water with a ceremonial flourish, swirl the now-empty bottles around most scientifically to fill them with foul air, put the ground glass stoppers back, and eventually give a bundle of them to Dennis, safely back at the University of Sydney. He presumably gave them to the Professor, whom I never met, and after a week or two Fred and I would get a typed out analysis of the percentages of oxygen, nitrogen and carbon dioxide.

Before we started all this, both Dennis and the Professor via Dennis, told us that laboratory experiments had proved that humans could survive concentrations of carbon dioxide of up to 30 per cent. We were even shown the medical textbook of the day with this claim.

What the learned ones failed to tell us, or perhaps did not know, was that such laboratory experiments were in a laboratory tank "atmosphere" where the other 70 per cent was pure oxygen.

What nobody at first appreciated was that, in a cave, where there is increased carbon dioxide there is a corresponding decreased concentration of oxygen. So you do not get only carbon dioxide poisoning, you simultaneously suffered from oxygen starvation, which is why a match will not burn. Not for us a 70 per cent rich oxygen supply, like the humans in laboratories.

So it was that we disappointed Professor Cotton at first, because we found it very tough finding carbon dioxide concentrations much above 6 per cent, and living to tell about it. When questioned, we responded with undergraduate Aussie bluntness "If he wants 30 per cent bloody carbon dioxide, he can find it himself."

Official Opening

But we developed a methodology of exploring foul air, first of proceeding until carbide lamps went out if you moved them, and matches would not light, while our breathing rate increased. Then we would switch our electrical head lamps on, and proceed very swiftly as far as we could, suffering sharp headaches and gasping for breath, breathing very fast.

We would generally separate by this stage, drawing a shortened match to see who would take the really, really final sample that day. One also tends to lose short-term memory, and all in all, it could get a little risky by about 6 per cent. Actually, we only turned back once, along an extension of the Drum Cave at Bungonia, which had a 140-foot (45 metres) initial tube-like drop at the start, and a waterfall, great for foul air. We got to the end of a passage at the bottom, and came to about a 10-foot (3-metre) drop, which we knew well and normally could scramble up.

We were sensible and drew short match to decide who would go over the drop for what we knew in our hearts had to be the last sample that day. Fred went over, did his thing with the bottle and then tried to get back. He could not, and I was so affected by the foul air by then that at first I frankly was not interested in Fred's problems. We both had splitting headaches. Finally I thought of taking off my boilersuit, and holding one leg while Fred grabbed an arm, and I pulled. We got back okay, but later decided that 6.5 per cent or so of carbon dioxide was enough.

However, we achieved, so we were told, world leadership in the field of foul air. I understand that later generations from ASF have gone even further into larger concentrations.

UNDERWATER DIVING IN CAVES

We also pioneered underwater diving in Australia, using one of the tourist caves at Jenolan. Our first effort was with a garden hose and a giant bellows somebody had "borrowed" from the Medical School. Dennis Bourke was involved again, and because Fred and I were still feeling a bit angry that the text books were wrong about foul air, we democratically agreed that Dennis would go in first.

I, the physicist, had "invented" a copper wire signalling system for Dennis. Something like "one ring" means give me more air, "two rings" mean you can stop pumping, and the like. But I was not a chemist, and my bare copper wires simply short-circuited in the underground Jenolan River, ringing the bell all the time, so we removed the signal from Dennis because of the noise.

Ben Nurse and I went "point", as they say on military expeditions, paying out the garden hose to Dennis as he went upstream and underwater into the blackness. We were the smallest and lightest in the team, and the larger fellows like Fred and Jim Tasker pumped the bellows as hard as they could when I called out instructions or Ben Nurse did.

Then the hose stopped going forward as smoothly as we thought it should, so I decided we had better pull Dennis back. It was as well we did, because by then he was a little blue - the hose had kinked and no air was getting through.

The next trip we used a bloody great and very heavy electric pump, and an improved garden hose. But it wasn't very successful either, so we decided there were other fun things to do.

Later on, they had invented scuba diving gear, much too expensive for us at university. Ben Nurse got together with the Sydney Underwater Explorer Club, but that is Ben's story to tell.

CONCLUSION

We also carried out other experiments, including direction-finding with VHF radio in co-operation with the amateur Radio Society of Sydney. That was great fun, but when they triangulated on me as being poised about 100 feet (30 metres) above the middle of the Blue Lake, well outside any caves, we realised there were some real problems to fix before it could be reliably used in Search and Rescue. Quite apart from a speleo having to lug around a great big "walkie-talkie" in those days, the signals were obviously being greatly distorted by the wet, cavernous and cracked limestone.

Official Opening

I studied the chemical composition causing after-glow of helictites, the lingering glow in some after a flash bulb was used. And we explored various other parts of the sciences of speleology, while others improved the caving gear. They developed new tools and instruments and flash guns like Henry Fairlie-Cunningham's flamethrower called the Diprotodon. It threw powdered magnesium measured by the pound (half kilogram) past a lighted flame, and was a very awesome device indeed.

But mostly we discovered new caves, and explored. We wandered through the bush and countryside. We camped. Through long and beautiful nights, in rain, snow or open starlight, we solved the problems of the universe across campfires and through innocent mugs of tea, when nobody had to speak and nobody chattered simply to make noise or hear his own voice.

The fifties were the days of innocence, before Flower Power and other, wilder, often sadder times of the sixties. Student demonstrators rarely threw anything, perhaps a small bag of flour or water, or a rose, and then mostly in good humour. We felt many things passionately, but respected each other. The worst thing a policeman could do was to take off his badge, so you could not take his number. They were the days before the mobile phone, oh rapturous days.

They were the days when you could hitch hike anywhere in perfect safety, apart from the occasional drunk with poor brakes on his truck. You could meet the wondrous range of people all around Australia, when the truckies were all great and friendly friends, being taxed into poverty by government rail subsidies and road taxes. You changed truck tyres, and a mob of trucks would stop to first check their trucky mate was okay. Then these giants of men would offer laughing advice, sometimes lewd, while drinking straight from large bottles of beer, and enjoy in a friendly way the inefficiency and weaknesses of university students. But among them, you could find more practical wisdom, thoughtfulness and friendship than you rarely found from begowned aloof Professors on campus.

You could get a ride in Victoria with the Benalla undertaker who had "buried the last of the Kelly's", and in New South Wales with the Tumut pastor driving a Holden up the winding dirt road through the Snowy Mountains faster and more dangerously than Jack Brabham in his heyday.

The pastor told Fred and me, as he raised clouds of dust and drifted in that tilt the first Holdens had round one sharp corner, "Don't be so scared. I have a private arrangement with God. If He wants the people to pray to Him in Tumut at 9 am sharp every bloody Sunday, and in Kiandra at 11 am sharp, then He can bloody well concentrate on me in between."

With a short prayer before entering a cave, and one of thanks on coming out, that would be enough for a pretty good risk management programme for speleologists.

I wish you all such happiest of days, and declare this conference open.

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