

**An early member of CAS, Tony Pritchett (1938 - 2017) was a British computer animation pioneer.**

Tony once told me that he felt *“life is a serendipitous exercise”*. I often think how lucky I was to meet him by chance at an animation screening in May 2012.

A computer animator and filmmaker myself, I was keen to keep in touch and it wasn't long before I asked him if he would mind me making a film about him. This request came as a bit of a surprise to the modest man, but being trusting and generous, he agreed.

We quickly became friends, and the more time I spent with him the more I learnt about the early days of the British computer animation industry. And Tony didn't just tell me things – he showed me films and photos, printouts, punched cards... There were so many items of interest in his flat... so many stories. And these stories weren't all about Tony. Eager to tell me about the work of others, I often got the impression that he didn't always value his own. (We had a running joke that if a can was labelled 'rubbish' it was likely to contain a gem!)

Now for the purposes of this obituary, I will have a go at telling you a little about Tony's life.

For a true Tony-style storytelling experience, grab yourself a green tea and at a particularly interesting bit, interrupt yourself by either:

- A. Taking a phone call from one of your many friends.
- B. Taking a phone call about one of the many events you're off to.
- C. Dashing off to record Dr. Who.

I'm going to begin in 1963. Tony was 28 years old and had recently left Elliot Automation (where he'd learned how to programme on an Elliot 803). He'd been relieved to discover computers, as up until this point he'd struggled to find a career that suited the way his mind worked.

*“I suddenly found something I could do! Wow. This is wonderful. It felt natural to me.”*

Tony was enjoying programming, and was a natural, but he was keen to do something a bit more creative. In 1965 he began work at the BBC directing educational shows. One such show was called 'LOGIC AND THE COMPUTER.' The presenter was Dr. Benedict Nixon who was based at the Institute of Computer Science (ICS), part of the University of London.

*“During the making of the program he (Benedict) decided that a good way of illustrating what he was trying to talk about was an animation made on the computer. He devised a program to draw diagrams on line printer paper which simulated the action of a computer”*

The pair made Britain's first piece of computer animation, 'THE TURING MACHINE', of which only fragments remain. It consisted purely of "X's and 0's and 1's and things like that", was made using computer printouts, and filmed using a rostrum camera and a bespoke peg-bar.

*"This was kind of like a revelation to me. I was enthused by the idea of making animation by computer. Benedict Nixon fed me various articles he'd found in the New Scientist about the work that was being done in the United States. I thought this is interesting!! I'd really like to do something with this. Benedict managed to persuade the authorities at the ICS to take me on as his assistant, but in fact I wasn't doing his work, I was doing my own work."*

In 1967 Tony became Dr. Nixon's research assistant, thus gaining access to the London University's Ferranti Atlas-1 at 43 Gordon Square. Here he worked alone for approximately six months creating 'THE FLEXIPEDE' a two minute cartoon about a whimsical, imaginary creature called the 'Flexipede'.

The Flexipede is Britain's first piece of computer animation. I would also like to argue that it the world's first computer animated character.

And this is how he did it:

After sketching out the creature on graph paper and plotting the necessary co-ordinates, he used FORTRAN IV to code the animation. Various subroutines were cleverly used to create loops of movement (like for example, the Flexipede's walk cycle). The coding for the film was punched onto cards which were in turn fed into Atlas. After outputting test-frames to a plotter, Tony output the film to magnetic tape.

Next he took this tape to Culham Laboratory – a nuclear fusion research facility in Oxfordshire. Here he used a second program, to get information off the magnetic tape and onto the UK's first and only Microfilm recorder. This 'Benson-Lehner' recorder was effectively a light-tight box with a 16mm camera pointing at a CRT electron beam-display. Keen amateur photographer Tony had no trouble with the 16mm side of things, and a pin sharp negative emerged from the developing fluid. (Not without a fair amount of de-bugging and trips to the London Atlas and back however!)

Hmmm. Now might be a good moment to pause and quote Tony again: *"I hope I haven't given you mental indigestion!"*

Next, he created the film's soundtrack using a domestic reel-to-reel tape recorder. Tony recorded the sound of a squeaky office chair, a garage door, a Jew's harp and himself gulping. Finally, since Atlas couldn't draw curves, Tony added Letraset titles and end credits to a piece of cardboard, which he shot on 16mm. In December 1967 the film was complete and in 1968 it premiered at the ICA's prestigious Cybernetic Serendipity exhibition.

*“Cybernetic Serendipity was in a way a kind of watershed in my life. I met lots of people who were from different worlds. It was like that for quite a lot of people I think. Scientists were pigeon-holed in science, engineers were pigeon-holed in engineering, and artists were... in a completely separate word altogether. I felt I was de-pigeonholing myself!”*

Tony also exhibited ‘SIDEBANDS’, an oscillographic installation he created with his long time good friend, Hugh ‘Ras’ Riddle (who, incidentally, came up with the name ‘Flexipede, although he’s keen to point out that *“we thought of so many odd-wordy things during our conversations that I’m loathed to take much credit”*).

Throughout the 1970’s Tony continued to experiment and innovate. He created many graphics for the newly opened Open University and had a brief stint working at an experimental cartography unit based at the Royal College of Art. He also very much enjoyed time spent at the Rutherford Laboratory in Chilton, Oxfordshire. Here he had access to the Chilton Atlas and an SD-4020 microfilm recorder, later the ICL 1906a and FR80, and where he met many friends and colleagues including ‘Antics’ software creator, Alan Kitching.

*“In the 70’s we did all sorts of things. Experimentation happened in fits and starts. I was mainly responding to what people wanted me to do at that time. During that period there wasn’t that much technical advance. A bit of progress was achieved when I did work for the Open University... I got to use the Atlas at the Rutherford Lab. The whole thing was easier to use than the Culham-setup that I made ‘THE FLEXIPEDE’ on because the computer and microfilm recorder were in same place. But the thing was - I had to spend days and days at a time down at the Rutherford Lab living in a local B & B.”* (laughs)

In the mid 70’s, (partly in response to a growing demand for computer graphics), Tony and friends Tim Bierman, Alan Joy, Valerie Robinson and Colin Emmett formed Software Generation Ltd. During this period, he also spent time at ‘The Bugstore’, creating amongst other things, colour title sequences for Thames Television.

*“It was a fairly good time in my life in a way. We had a house full of people at the time.”* (chuckles)

In the late 1970’s he began working freelance as an animator at System Simulation using a Tektronix 4014 to output vector graphics to a plotter. Here amongst other things, he worked on commercials, and created a docking sequence for Ridley Scott’s ALIEN (1979) using this technique. This later famously appeared in BLADE RUNNER (1982).

*“He (John Lansdown) was one of the people that started CAS. I was an early member (I can’t claim to have actually started it) but when it started off, we used to meet about once a month in John Lansdown’s office. We were all anxious at that time to get some sort of commercial computer industry going because I needed work and we needed to progress the whole thing to higher levels.”*

In 1982 Tony worked on the Channel Four logo project. The executives wanted to launch the channel with something very modern-looking. Tony created and devised all the animation, in several now iconic formations. Channel Four were delighted with the result, but not so much with its subsequent wobbly colouring-in by hand!

*"I spent about a week on the phone in Ch4 offices to the contacts I had just made at Siggraph. I ended up in LA at Triple-I with a hired Tektronix, squirting 3D vector coordinates down a serial line into their Foonley supercomputer (a potential rival to the Cray, used to create the 'Solar Sailor' sequence in TRON). Talk about a mouse driving an elephant!"*

A few weeks later Ch4 launched with its familiar fanfare and now ubiquitous rotating logo in fully rendered 3D glory. The *"last piece of commercial animation I ever did. I'd sort of fallen out of love with it I suppose. I didn't decide to leave the industry – it just got steadily more difficult for me to do the things I enjoyed doing."*

Yet Tony never lost interest in filmmaking. Photos he showed me clearly illustrate that he had a camera of some description in his hand pretty much since he was a small boy. In recent years he was never seen without his GoPro!

Returning now to 2017 and my more personal recollections of Tony, meeting him was a bit like meeting a favourite Dr. Who. He introduced me to so many wonderful people and told me stories about many more now longer with us. But he certainly wasn't stuck in the past. Jetting off to conferences, attending gallery openings, CAS events and the like - he had a wide range of interests and friends. He practiced alternate medicine and was particularly interested in advancements in green energy. Open minded and young at heart he admitted that he was into some *"Whacky far-out stuff! If anyone's got a new idea I want to know all about it! If things sound unlikely I'm intrigued by them. I think predictable things are boring!"* (laughs).

He had such a great sense of humour. Fond memories include whenever we went for a meal he'd always joke about working out the bill using Douglas Adam's 'Bistromathic Drive'. He was a lovely, kind, jolly, modest, gentle man who was a true, dear friend and inspiration – and he left us at his humanist funeral service to the sound of The Tardis dematerialising.

I asked him if there is any other career he might have wanted:

*"I think I would have liked to be an explorer, actually (chuckles). That's one of the things I would have liked to have been. I'm not sure I would've liked to have been an arctic explorer (chuckles). That's a bit cold for me - or even a jungle explorer... well I don't know...But I do like the idea of exploring - new territories. Yes, I think I do... I think I do have the explorer's mentality".*