

# Transcript

SIMON BELL: Hi. I'm Simon Bell. I want to welcome you to this series of podcasts celebrating 50 years of applied systems thinking in practise in the School of Engineering and Innovation at the Open University. I'm an emeritus professor at the OU. I started with Systems in 1996, long ago. I've tried my hand at lots of things, CEO of a research institute, editor of a journal, writer of novels. But hey, where I am, where I am. People have their own definitions, but to me, systems is primarily the understanding of the world as relationships, the flows between things. The conversation I'm about to have is supposed to be systemic. I'm interested in my guest telling me about himself, his world, his shared world, and his view of perspectives of systems.

Just a few words about Peter Tuddenham. He's a president of the College of Exploration and owner of Coexploration Limited. And probably most notably from my perspective, the former president of the International Society for the System of Soft Sciences. Now Peter, big welcome to the podcast.

PETER TUDDENHAM: Thank you very much. Pleasure to be here.

SIMON BELL: I should of course say that your relationship with the Open University goes back to 1978, PT 281 Industrial Relations. Which is-- you know, that makes you a founder member, I think.

PETER TUDDENHAM: Well, I'll tell you, that was, you know, a really wonderful course and eye opening. And I think the first chapter said, before you can understand anything about industrial relations, you have to understand about systems. And that, you know, sparked my interest to start there. The general systems theory was mentioned in the course and set me on this path of systems in my life. So yeah, it was a really good course and that led on then to T 241, Systems Behaviour, the following year. It was just such a wonderful experience. And I look back on it with tremendous respect and reverence, frankly, the profound effect that course had. I was in my early 20s. I just finished five plus years as an engineer army officer in the British army, where I'd been to Germany, USA, Northern Ireland, served in Northern Ireland.

I experienced understanding systems Behaviour because of that course. And it started a deep appreciation of the, as you said, relationships, but the connections between things and life in general. Yeah. And it was T 241 which looked at these different parts of British life starting with the container port in Southampton which was quite close to where my parents lived in Christchurch in Dorset. And we went on to look at a range of British systems, telephone system, the local government system in Brighton Marina, the car manufacturing system, the heart-lung system, and the sheep rearing tourist system in the Lake District just to give you sort of a quick run through of some of them that were striking. And in each one of those case studies, I mean, it was starting with real application of understanding a situation and then looking at the different systems, philosophies, methodologies, tools, techniques, so on that could be used to gain a deeper understanding of the connections and the complexities of the situation.

So it was thrilling. I was just totally engaged. And the other part was really exciting about that, you've got a massive, big box of stuff that came and I spent hours building a model of the stacking system over Heathrow with perspex sheets and aeroplanes and dice and you know. So this idea of practical engagement of understanding real systems gave me the answers of the questions I had all the way through school that no teacher answered. You know, said, oh, just study this discrete subject and that's

what you need to do and pass the exams. And nobody would explain to me how this was all connected in relationships and you know?

And I think the really momentous thing for me which was going to Keele for the summer school and the experience was-- well, that was life changing. I mean, here was I like in my young 20s, former army officer, had a very nice education, blah blah, blah. And what do you get in the summer school? You get everybody, don't you? You get-- you know, we had 20-year-old secretaries, we had mid-career professionals, we had milkmen, we had retired generals, we had farmers. You know, I mean, just the whole cross-section of British, you know, UK society from all parts of the country.

And we were there for a week doing soft systems methodologies on complex problems using Stafford and [INAUDIBLE]. I think it was sort of a systems engineering approach to other problems. And there were some lovely games there we did about forests and timber industry and environmental problems, world problems, you know? And getting up with all of this great, wonderful people from all classes with all accents, you know, all ages, all sexes. I mean, you know, it was just-- it was beautiful.

And we sat around in a collection of humanity in the cafe after the week. And you know, tears in our eyes because it was an emotional coming together of people of such diversity, you know, dealing and wrestling with problems. And it sort of was a hopeful exercise. I think people felt, wow, here's a way we can do things. So that was really-- and still is.

And I really would love to go back and work with somebody to recreate the contemporary version of systems Behaviour, because I think that is-- you know, it's what it's about. It's how we behave, how we understand Behaviour and how we can, you know, help make the world a better place. And that's what that course was all about.

SIMON BELL: Well, wonderfully erudite overview of the systems experience, Peter. I mean, given where you've gone with all that, I mean, we're talking about T 241, so 1979-1980, somewhere around about that time. And it's clearly had a huge impact upon you. The fact that it swept in so many perspectives, so many views of so many different people says an awful lot about the outreach of the systems concept, doesn't it?

PETER TUDDENHAM: Gladly. And you know, it's led me, obviously, through my life. I mean, I can't believe I'm 67 already. It's sort of really frightening how life just whistles by, doesn't it? And yeah, I found myself just recently re-engaged with the former Society for General Systems research, you know, which sort of was started, ironically, the year I was born 1954 by, again, a group of scientists who felt that science was not serving humanity. You know, James Greer Miller in a presentation I listen to of him introducing his living systems theory talks about how these scientists came together in North America, along with talking with Bert [INAUDIBLE] and so on, and were distressed that science had ended up creating an atomic bomb, you know? And they said, can't we do better than this for heaven's sake?

And so that was really a strong motivation for the founding of the Society of General Systems Research is to look at all those elements in science that connect up. And that quest still continues, frankly. I mean it's extraordinarily frustrating to work in these sort of bounded disciplines or to have to work in these bounded disciplines and bring this perspective, which still for so many people is so alien almost.

And you know-- but then on the other hand, there are enormous areas of hope on that front and there's a lot of work going on, and it's great to see. I found myself in the position of VP of education for the society. And I was moaning, frankly, at the conference. I was loudly moaning about all the different voices and

systems and saying we need systems literacy people. We need to develop, come together and be more concerted in a focused effort to develop systems literacy.

SIMON BELL: Well, that's lovely, Peter. I mean, I get educationalist, consultant, entrepreneur, literacy promoter, advocate. I wonder, have you got perspective for the future as well? I mean, I understand your interest and your relationship with the College of Exploration. Does that point us any way towards the future for systems?

PETER TUDDENHAM: It is something on my mind. Now that I got very engrossed in the work with the International Society for system sciences over the past four years. And now my term has finished, I'm now turning to reinvigorating the efforts on systems literacy. And of course, I've got a not-for-profit in the United States called the College of Exploration and we've got a global audience. You know, we've had 20,000 students, mainly teachers and educators and others, come through our online learning system. And so we've got a basis and a platform. And yes, absolutely.

SIMON BELL: I'm very intrigued by this concept of the, if you like, literacy. I worked for a while with a French agency on the Mediterranean Action Plan. And I was working with a bunch of people across the Mediterranean and I was using the word systemic. And then I gradually realised that everybody else was interpreting it as systematic. And we had long, long, long conversations, I mean, unbearably long conversations about this use of a word what I meant by systemic and what they interpreted as systematic, and why it was important. And I just remember thinking, I wish there was a way through this. [LAUGHS]

PETER TUDDENHAM: Well, it's like the term literacy. I mean, when we first set ocean literacy, we did it for the United States. I mean, we weren't thinking globally at all.

It was a word that came up. We put ocean with the word literacy. So if you're literate, you understand your relationship to the ocean in its wholeness, in its totality from everything from what it does for the climate to what it does for fish to what it does to transport to what it does to shaping the Earth, and to how we've ignored it and still ignore it in terms of exploration and the amount of money invested in understanding its effects. And there's new discoveries going on every day about creatures in the deep ocean.

Symbols evoke a deep emotional response and we know how effective diagrams can be. You know, the London tube map is an iconic example of representation of a complex network in giving people ways to navigate it. So iconography.

And sounds. I mean ray challenged me when we had a retreat on systems literacy. He said, how are you going to do this in a multi-sensorial way? And I said, you know, rather than producing a written guide, how do you really represent systems literacy in a multi-experiential way? Want to try and be-- you know, represent systems in its broadest possible explanation. So that's a long answer to your question, sorry.

SIMON BELL: Well, no, no. It's a super answer. It's a wonderful overview of your interests and your passions. And your passion definitely comes very much through. But also, your communication of the systems concept to the wider world. Peter, thank you very, very much for joining us on this podcast today.