



Creative insight

Rob Jenkins interviews Dennis Sherwood of Silver Bullet

by Rob Jenkins

Dennis Sherwood is a creativity and innovation consultant. His international clients include financial institutions (e.g. The World Bank), government organisations (e.g. The European Commission and The European Parliament), and charities (e.g. World Vision and Street Child Africa). In 2001, Dennis founded the Silver Bullet Machine Manufacturing Company, with a view to conferring on client organisations the ability to solve problems, to generate and implement new ideas, and to grasp opportunities reliably and repeatedly. GYA Member Rob Jenkins interviewed Dennis.

We hear a lot these days about 'creativity on demand'. What is your view on its impact?

One plausible side-effect is that it will increase our powers of empathy. Crossing disciplinary boundaries exercises and strengthens our ability to see an issue from multiple points of view. And that in turn helps us to engage people with whom we disagree; to make progress on issues that tend to divide us. How do we reconcile opposing value systems? How do we tackle global inequality? These are among the most important problems of our time.

You spend a lot of time talking to people about creativity. What do you mean by creativity? Are we talking about artistic talent?

I'm very much influenced by Arthur Koestler's insight that, fundamentally, creativity is the formation of 'interesting' patterns from *pre-existing components*. Before I read his book *The Act of Creation*, I had thought that creativity was a natural gift with which the fortunate few are born - and that the rest of us have to do without; that creativity is that sudden 'light-bulb' moment; that creativity is an act of true, solo, originality. And all the other books I had read on creativity had all implied some form of 'magic'. So Koestler's recognition that creativity is all about forming new patterns from things that *already exist* was a real surprise. But the more I read Koestler's examples, and the more I thought about it, the more I was impressed with Koestler's truth. Neither Beethoven nor the Beatles invented musical notes, but they surely crafted wonderful, and wonderfully different, patterns from the same, pre-existing, tones. Mondrian did not invent red or white paint, but he made some beautiful patterns. And when Newton referred to 'standing on the shoulders of giants', he was explicitly acknowledging his debt to his predecessors such as Brahe, Kepler, Galileo, Descartes and Horrocks - all of whom provided some critical 'pre-existing components' which Newton finally assembled into his laws of motion and gravitation. This goes far, far beyond 'artistic talent' - I believe creativity is a vital human characteristic, and is essential in all aspects of human life, from politics to physics, from art to my own behaviour. And my response to the question 'what is the most powerful example of creativity you can cite?' is not 'Einstein's theory of general relativity', nor 'Adam Smith's invisible hand', nor da Vinci's *Mona Lisa*, nor Stravinsky's *Rite of Spring*. It's when I (or you!) change my (or your) mind, for good reason.

How is this view of creativity related to knowledge generation or discovery?

Drawing once more on Koestler, I'm convinced that creativity is totally knowledge-based. You can't form new, interesting patterns from pre-existing components if you don't know what those components are. So knowledge is the raw material for creativity, and the more knowledge you have, the more opportunities you have to be creative. Or, to draw on Newton, to stand on the shoulders of giants, you have to meet the giants first, and get to know them well. But there is a catch. Knowledge certainly is essential, but there is something else that you need if you want to use that knowledge creatively. To be creative, you must also be willing to 'let go', to allow your current knowledge to be challenged, and perhaps discarded. You cannot be 'in love' with your own ideas, and you must allow yourself to 'unlearn'. Knowledge and challenge lead to discovery - which is of course not a new idea at all: Fichte got there first, more than 200 years ago, with his trio 'thesis, antithesis, synthesis' (and it was Fichte, before Hegel!).

In a sense, there's a balance between order and chaos. It reminds me of cultural tensions between the sciences and the arts. How much overlap do you see between science and art? How much overlap should we want?

To me, there is no fundamental difference in the process of creativity as applied to the arts, or to science, or to any other aspect of human endeavour: an engineer can be wonderfully creative in solving a technical problem as can a health care worker in dealing sensitively with a distressed patient. Once again, I think Koestler has provided some remarkable insights. The Act of Creation explores the nature of creativity in relation to the arts, notably literature, poetry and drama; to science; and also to humour. His conclusion is that the process of creativity is the same in all contexts, based on combining different pre-existing components together (Koestler calls this 'bisociation'). What is different is the emotional stance of those involved. Great art is hugely emotionally engaging; when you read a great book, you want the heroine to fall in love with the hero, and you become the characters. The author explicitly seeks to achieve this emotional appeal. Science, in contrast, is emotionally neutral; whilst a necessary condition

for humour to work is for the reader or observer to be emotionally disengaged - when the fat man slips on the banana skin, most of us laugh at the sight of the pompous made foolish: we wouldn't laugh if we worried about the broken leg.

You describe this process of engineering collisions between remote ideas. How do we know which ideas are worth connecting? Or is the 'hit rate' high enough that random collisions pay off over time? Is this process of connecting remote ideas always creative, or can it be destructive or dangerous?

Yes, 'bisociation' is indeed, as you correctly state, all about 'engineering collisions between remote ideas': that's exactly what, for example, Picasso did when he created Les Femmes d'Alger. But I don't think it is at all random. Earlier I referred to the formation of 'interesting' patterns, not just 'any-old' patterns. What we are seeking is a new pattern in which the whole is genuinely greater than the sum of its parts. There's a technical term for this - 'emergence'. The goal is therefore to discover truly 'emergent' patterns, where the nature of that emergence depends on context: in visual art, it is perceived beauty, or perhaps shock; in literature, it is emotional involvement; in science it is a deeper explanatory power, or public utility (such as a solution to the plastic pollution problem); in public service, it is, for example, the design of social systems which are more fair across the entire population.

New ideas bring with them a mixture of opportunities and risks. How do we manage that dynamic?

Indeed so. Not all ideas are 'good' - and in fact many, if not most, are bad. I play a game with my son, based on my 'rule of thumb' that only about 1 idea in 100 is worth pursuing. So when I say to him 'I've just had a great idea', he will reply 'Mmm. That's number 56. You have 44 to go!'. Creativity - having ideas - is only one part of the overall picture. Yes, you have to have ideas to start with, but once you've had them, you need to think about them, refine them, develop them - and indeed discard them if they are not good. This is all about what I call 'wise evaluation' - how to judge whether an idea is strong or weak, often on very limited evidence. In my experience, 'wise evaluation' is more difficult than having the ideas in the first place. Very often the 'rule' for evaluation is 'I like the idea'



or 'I like the person who suggested the idea.' These, at a human level, are very understandable... but... whether or not I like the idea, or the person who suggested it, is not a valid judgement of the idea itself.

It's harder to manage risks when the consequences play out over long timescales because uncertainty is generally higher. How do we make progress on problems with a long-term character - problems like pollution or climate change?

Yes, you are absolutely right. And not only do the consequences play out over longer timescales, they also extend over broader geographies too. Today's key problems – of which pollution and climate change are two significant examples – aren't local, but glob-

al. The best solutions require a truly joined-up approach, across national and political boundaries. So maybe this is something that GYA can truly contribute towards: to act as a global, energetic, enthusiastic and hugely intelligent and committed community to generate great ideas to solve the 'wicked' problems; to provide insight and wisdom in evaluating those ideas; and to form an influential lobby group to get things done!

Rob Jenkins (UK) is Reader in Psychology at the University of York, UK.

Email: rob.jenkins@york.ac.uk