'First you see, then you know': Becoming more creative in academic work'

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Patrick Dunleavy, *Professor of Political Science at the LSE, offers some helpful strategies for innovative and creative thinking.*

Karl Popper memorably said: 'There is no such thing as a logical method of having new ideas or a logical reconstruction of this process'. That remains true, and so any advice here can only hope to prompt or stimulate your own thinking, in a somewhat tangential way.



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1. Take the risk of trying to think innovatively

'You cannot jump the gorge in two leaps', Chinese farmers reputedly say. So when any venture sounds too risky, our incentive is to avoid the effort and just make the long trek around via a distant bridge. In academia one of the ways of doing this is by over-extending literature searches. The implication for researchers is, as Arthur Schopenhauer urged: 'Don't read, think!'

Of course, your thinking also needs to be well-informed, matured and perhaps even saturated within your professional context. But on its own, knowledge of a field without the stimulus of an effort to reconstruct or redirect attention, to vary an assumption, to 're-see' a line of analysis, will always just produce more of the same. So it may be useful to deliberately think in 'blue skies' (even 'ignorant') mode, some of the time. Some of what you get will not work. But, as Linus Pauling said: 'The best way to get a good idea is to get a lot of ideas'.

It's also far worse to miss one good idea for fear of writing down ten poor or half-baked ones, a diffidence problem that seems to acutely afflict many intellectuals. As William Emmerson remarked: 'In every work of genius we recognize our own rejected thoughts; they come back to us with a certain alienated majesty'.

Edward de Bono wrote about the difficulties people have in thinking about what is only 'possibly correct, possibly wrong'.... Bear in mind too that nothing is so evanescent as your own good ideas, so quickly past and lost. 'Chance gives rise to thoughts and chance removes them: no art can

keep or acquire them', wrote Blaise Pascal. 'A thought has escaped me. I wanted to write it down. I write instead that it has escaped me'.

2. Look harder

..... A first stage in seeing a new idea is often to problematize things that we prosaically explain in unreflective ways, seeing past 'common sense' accounts of how things work. 'Common sense is not concerned with the relations of things to one another...' said the theological Bernard Lonergan. '[It] has no theoretical inclinations. It remains completely in the familiar world of things for us'. 'Familiar things happen, and mankind does not bother about them', said A. N. Whitehead.'

A willingness to realistically but critically probe or challenge orthodoxies may also be important..... Again being critical can be an uncomfortable stance to adopt..... Yet 'a dead thing can go with the stream', said G. K. Chesterton,' but only a living thing can go against it'.

'The difficulty lies, not in the new ideas, but in escaping from the old ones, which ramify, for those brought up as most of us have been, into every corner of our minds', said John Maynard Keynes.

'Keep on the lookout for novel ideas that others have used successfully', said Thomas Edison. 'Your idea has to be original only in its adaptation to the problem you're working on'. As I've argued in another blog, finding a good idea in another field and then working out how to transpose it to your own and make it do useful work can often be a promising strategy.

3. Look widely

Of course, academics and scientists must look a lot at journals. But remember also that anything you read in journals is 'light from a distant star' — it tells you only where the field was three years ago in STEM disciplines, perhaps four+ years in the social sciences.

So now you also need to scan academic blogs (especially multi-author blogs), use academic Twitter, xArchiv, and other modern forms of digital scholarship. Look also at conference papers, Google Scholar, Scopus and search options regularly. Go to conferences.....so you'd better know where your field is going.

Don't be a social media hermit. At a minimum join Research Gate and Academia.edu. Once there, follow all the people close to your field and those you admire, so as to get instant alerts of their new stuff.

Look beyond your discipline at other STEM or social sciences or humanities subjects, especially in blogs and forms of science and scholarly communication that are more accessible. See if you can cross-pollinate, and take their good ideas for a walk in your garden. Look outside academia too — at multi-author blogs, newspapers, magazines, cultural trends.

4. Keep your practice under review

Watch for self-imposed mental limits – the little, extra constraints we often impose without realizing it. Grow ideas more. Jot everything down (to cope with the Pascal problem). Record your ideas and first impressions immediately, and in a form that you can definitely find again.But there is also some evidence that writing, sketching and otherwise doodling notes of ideas may work better than computer-based systems.

Develop your hunches, and constructively use your non-academic emotional or professional commitments. Developed a bit they can be creative ('push a bit further') drivers, so long as your powers of realistic critique are not too dulled. Use analogies, metaphors, images, little prototypes to drive intuitive explanation—even in very technical areas. Persistence is also important, because insights take time to develop.

5. Be a constructive self-critic

Always sift and critique your ideas as a separate stage of your thinking, after you've let them grow a bit, and created and recorded a whole field of potentially relevant ideas. Never 'brainstorm' or generate ideas and then immediately critique them.

Focus on a problem, never on a 'gap' in knowledge. Puzzles are opportunities, gaps are just a void, that may exist for good reasons.

6. Expect innovation to be an 'up and down' process

There is a dialectic inherent in all learning — to see things differently you need to go through a phase of unlearning what you thought that you already knew, and embrace the uncomfortable fact that you don't know what is going on. As André Gide observed: 'One does not set out in search of new lands without being willing to be alone on an empty sea'. A period of what Eddy Izzard called 'humiliation' is an essential transition stage in re-understanding. You have to tear the 'creativity muscle' a little to make it stronger. This can be psychologically (and physically) costly, and demoralizing at times.

But people are also most creative when they are not too worried. 'Conditions for creativity are to be puzzled; to concentrate; to accept conflict and tension; to be born every day; to feel a sense of self', said Erich Fromm. And Carl Jung, went further, arguing: "The creation of something new is not accomplished by the intellect but by the play instinct acting from inner necessity. The creative mind plays with the objects it loves."

You have to be psychologically secure to innovate, so it is important to keep your 'risk' exposure comfortable for you. Be somewhat over-optimistic and over-ambitious, but also get some good insurance in case 'breakthroughs' or promising new insights don't happen. Try to identify and build in fallback options, 'exit ramps' and 'second best' outcomes.

Over time, the effort to think more creatively will hopefully pay dividends.