



Check for updates

AUTHOR:

Ian Glenn¹

AFFILIATION:

¹Research Fellow, Communication Sciences, University of the Free State, Bloemfontein, South Africa

CORRESPONDENCE TO:

Ian Glenn

EMAIL:

GlennIE@ufs.ac.za

HOW TO CITE:

Glenn I. Research ratings, research coherence and justifying the butterfly. *S Afr J Sci.* 2022;118(7/8), Art. #13015. <https://doi.org/10.17159/sajs.2022/13015>

ARTICLE INCLUDES:

- Peer review
- Supplementary material

KEYWORDS:

research coherence, innovation, evaluating researchers, interdisciplinary research, Charles Fourier

PUBLISHED:

28 July 2022

Research ratings, research coherence and justifying the butterfly

Significance:

The South African National Research Foundation’s insistence on research coherence and specialisation as major criteria in ratings exercises may be misjudged. Opportunistic and wide-ranging interdisciplinary research may be more important and more ethically justified in the Fourth Industrial Revolution.

Even the aerobatic swift / Has not his flying-crooked gift.

Robert Graves, ‘Flying crooked’

Float like a butterfly, sting like a bee.

Muhammad Ali

Introduction

A few years ago, a leading academic figure in my field shared, generously, insights into the ways in which the South African National Research Foundation (NRF) regarded research. We should not, she noted severely, behave like butterflies, flitting from one topic to another. The NRF wanted research coherence, proficiency in a field, persistence in establishing authority as specialists. Current NRF guidance on research ratings continues to note that ‘unfocussed/opportunistic research’ is not desirable and will lead to poor ratings or no ratings.

As a card-carrying contrarian, I argue that the obsession with coherence has led, and continues to lead, to bad effects: narrowness of focus, failure of interdisciplinary research, a failure to use the archive constructively, and a failure to respond to new challenges timeously. I want to justify the butterfly.

Sociology of knowledge and the butterfly

This is not about the butterfly as an analogy where there is not much point in spending caterpillar years if one doesn’t eventually fly – though that is a relevant point. A more helpful analogy would be one in which the butterfly turns into one of Karl Mannheim’s *freischwebende Intelligenz*, the concept of unattached or free-floating intellectuals he took over from Max Weber.^{1(III-4)} These were the people he hoped would rise above class interests, moving to produce a dynamic synthesis of social views. But butterflies aren’t floating or just unattached so much as they are ranging and searching, driven by complex motives.

Another defence of the butterfly can be found in the work of French utopian thinker Charles Fourier, one of the founders of socialism.² For Fourier, the ultimate passion was the butterfly passion – the passion of variety he saw as necessary for a full life. Part of the NRF uneasiness with the butterfly seems to arise precisely from the puritan suspicion that butterflies enjoy their research too much.

Are butterflies a new manifestation of Isaiah Berlin’s foxes who know lots of things as opposed to the hedgehog who knows (and presumably endlessly studies) one big thing?³ Berlin’s big distinction in his famous essay, however, was about those with ‘a single central vision, one system’ as opposed to ‘those who pursue many ends, often unrelated and even contradictory... These last lead lives, perform acts and entertain ideas that are centrifugal rather than centripetal.’^{3(p.2)} My interest here is less in the distinction between monists and pluralists – a distinction which seems increasingly dated – than in questions of method and focus. Nonetheless, in the spirit of Berlin’s essay, let us oppose our butterflies to the NRF’s virtuous termites, industriously, relentlessly, turning grass into a wonderful self-contained, hermetically sealed structure, and to the spider with a web that is constructed to trap passing prey.

My suspicion about coherence arises from a mix of factors, the latest being work on an NRF rating panel. Coherence here has either turned into people being or presenting themselves as super specialists with a narrow field, no doubt advised by dutiful research offices in universities which have internalised the NRF criteria. They say coherence, I mutter dull dog. And the fields are too often, in my biased view, trivial and marginal. But, of course, the more specialised and arcane, the more likely you will be to find a few favourable reviewers in the same area.

A second concern is that coherence can mean a resistance to finding out new material, to following interesting smells (good or bad) wafting from the archive or the news bulletins. The spider spinning its web or the termite mound reaching into the sky may be very impressive but what are they missing? What are the challenges that they are shaped to ignore?

I am not the only person noting the problems of the straitjacket of coherence and the problem goes beyond the humanities. Peter Thiel complains that innovations are slowing down.⁴ Here is Derek Thompson in a recent *Atlantic* article exploring why science and innovation in the USA seem to be stagnating:

Today’s scientists typically rely on grants from government agencies such as the National Institutes of Health and the National Science Foundation. This grant-writing process is so grueling that for many researchers it can account for up to 30 or 40 percent of their working hours. Although the NIH and the NSF are well-meaning organizations, they’ve



created a very specific market for scientific research. Researchers are more likely to be funded if they can prove deep expertise, which has tipped the scales in favor of older scientists. Researchers are more likely to get funding if their proposals seem plausible to several members of the peer-review process, which encourages scientists to prove that the questions they're asking have sort of already been answered.

When you put these market choices together – a bias toward older investigators over younger researchers, a preference for deep expertise over cross-disciplinary exploration, and an emphasis on plausible projects rather than radical ones – you get exactly what you bargained for. Today's scientists spend their time begging institutions for money to produce incremental science that clusters around a small set of seemingly safe ideas.⁵

That seems to me as true in the humanities and social sciences, although the 'seemingly safe ideas' have a more tolerant range and wider partisan divisions.

Coherence derives from a time of clear disciplinary boundaries. We are living in the age of Harari's *Homo Deus* where artificial intelligence and new technologies make academics the latest endangered profession.⁶ In the Fourth Industrial Revolution, our narcissistic certainty of our own purview of knowledge risks making us the equivalent of a London taxi driver investing years into The Knowledge in the era of satnavs. The great German media scholar Friedrich Kittler said 'Simple knowledge will do'⁷ and that threatens to make redundant much of what has traditionally passed for training in one academic professional field. When we realise that we benefit from interdisciplinary work, we have to be willing to abandon some kinds of coherence to open ourselves to the new, to be opportunistic, and to seize opportunities.

The archive is another place where coherence and specialisation are threats as much as benefits. Assuming you know what you will find when you go into the archive is dangerous, maybe even deadly. If you emerge from archival work with the coherence you expected when you set out, or when you applied for funding, you are wearing very powerful blinkers, or rose or other coloured spectacles. Most important archival work involves pushing the researcher out of comfort zones and the already known and often demands new tools and help from people in related fields. The same thing could be said of much interview work or field research.

To understand what the butterfly may offer, let us return to the Robert Graves poem about the butterfly. This poem deserves recognition in a scientific journal, as all ornithologists no doubt immediately noticed, as it inspired Richard Brooke's name for the sub-species of Little Swift, *Apus affinis aerobates*. But what might the 'flying-crooked gift' of the butterfly be?

That flying-crooked seems to me to catch the tentative, exploratory, yet driven interests of the butterfly researcher. In the humanities, butterflies need a range of research skills and tools – linguistic, interpretive, theoretical – that differ in interesting ways from the termites and the spiders. Butterflies respond to things, to calls for papers, to new challenges, to complex problems and puzzles. When the COVID pandemic comes, they take the moral and intellectual challenge, the opportunity, in short, to see what academics can offer from their different perspectives.

They change focus because the world has changed radically, whereas the NRF, it seems, would prefer people not to be distracted by events and lose focus and not to be 'opportunistic'.

Butterflies write interesting reviews. They are driven by a sense of injustice or unfairness and when this happens, they can switch, as Muhammad Ali bragged, and sting like a bee. They detect and pollinate. Building a termite mound doesn't give you much room to notice different kinds of injustice or unfairness, whereas the spider is set to catch a predictable prey in its web. The butterfly has a moral, contrarian, problem-solving orientation. At their best, butterflies become like Whitman's poet who 'judges not as a judge judges but as the sun falling around a helpless thing'. Or, perhaps, to becoming consulting cultural and social detectives interested in new crimes and new cases.

Berlin in his essay admitted that his distinction between hedgehog and fox was a simplification: 'Of course, like all over-simple classifications of this type, the dichotomy becomes, if pressed, artificial, scholastic and ultimately absurd'³. The same is clearly true here and the ideal scholars no doubt combine *sitzfleisch* and flightiness. But those who see butterflies as evanescent and lacking staying power may be wrong – good butterflies go on being curious and intrigued and flying crookedly longer. Charles Fourier was one of the pioneers of utopian socialism and his point about the butterfly or alternating passion was that change and diversity are important to the possibilities of a full life – and a full research life.

As for the NRF – how about some different criteria for research excitement and research importance rather than research coherence? Extra points to those who have collaborated with somebody outside their own discipline. Extra points for surprising archival discoveries that disrupt coherence. Extra points for responding to a new challenge with something unexpected. Extra points if you fall between disciplinary panels and disconcert those looking to find reviewers for you. And, particularly, extra points for being opportunistic and being willing to change focus.

Competing interests

I have no competing interests to declare.

References

1. Mannheim K. Ideology and utopia. London: Routledge; 2013. <https://doi.org/10.4324/9781315002828>
2. Fourier C. The theory of the four movements. Cambridge, UK: Cambridge University Press; 1996. <https://doi.org/10.1017/CBO9780511806841>
3. Berlin I. The hedgehog and the fox: An essay on Tolstoy's view of history. London: Weidenfeld & Nicolson; 1953.
4. Wang D. Why is Peter Thiel pessimistic about technological innovation [webpage on the Internet]. c2014 [cited 2022 Jan 01]. Available from: <https://medium.com/@danwwang/why-is-peter-thiel-pessimistic-about-the-future-of-technology-d2897f9659bb>
5. Thompson D. Is America really running out of original ideas? [webpage on the Internet]. c2021 [cited 2022 Jan 01]. Available from: <https://www.msn.com/en-us/money/news/is-america-really-running-out-of-original-ideas/ar-AARZ43t>
6. Harari YN. Homo Deus: A brief history of tomorrow. London: Random House; 2016. <https://doi.org/10.17104/9783406704024>
7. Kittler FA. Gramophone, film, typewriter. Stanford, CA: Stanford University Press; 1999.