

From maverick to mainstream: A mixed methods bricoleur contemplates the poly-crisis

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When we look at the current state of our world, I think we would all agree that we face a future with an overwhelming array of wicked problems – a state of poly-crisis characterised by interconnected, multi-sector catastrophies for which there are no optimal solutions or definitive answers. Can mixed methods research, which integrates multiple interdependent approaches to making, gathering, and/or analysing data, contribute to finding some of those solutions or answers?

#2 Can mixed methods research meet the demands of the poly-crisis?

- **Mixed methods research** integrates multiple and diverse approaches to generating and working with data within a single program of study, such that they become interdependent in contributing to advances in the theory, knowledge, application, and/or evaluation of the object of study.
- The **poly-crisis** describes a state characterised by interconnected, multi-sector catastrophies, or “wicked problems”, for which there are no optimal solutions or definitive answers.
- A **maverick** is a person who thinks and acts independently, in often unexpected or unusual ways, while a **renegade** goes further, often ignoring conventions and breaking rules.
- A **bricoleur** uses and adapts whatever tools, data, and skills available to them in a trial-and-error fashion to contend with the contingencies arising in an open series of applications

In this talk I will briefly describe and draw some lessons from my long journey as a maverick – perhaps even a renegade – research bricoleur, and reflect on some implications for mixed methods researchers starting out today in a world that is increasingly in a state of crisis.

To briefly contextualise – my journey

#3 Brief context – a journey

1967–71: Studied at the “brand new”, highly innovative Macquarie U, with a research emphasis from the start: Era (in psych) of objective behaviourism and controlled experimentation, but I focused more on personality and social psychology

1972–79: PhD research: Community-based, action-research, mixed-methods study with an “upside down” structure (failed by local examiner)

81–85: Building an underground house (supervision and hands-on!)

1980–90: P/T community development -> freelance evaluation research

1977–1999: Learning new methods prompted by developments of and in personal computing
1991–99: Researcher development position at WSU; academic research
1998–2000: Encounters with “mixed methods” and leaders in the field
2000–2014: “The Research Farm” retreat at Bowral – methods training, consulting, and hosting
2000–2025: Retainer/adjunct positions (UNSW/ACU/WSU)
1999–2026: Writing analysis-focused methods texts

When I started my studies at Macquarie University in the 1960s, it was a “brand new” university, in a season of social ferment – there were just 300 full time undergraduate students. It had an innovative leadership, a structure that encouraged students to start with a broad spectrum of courses (the units I took were from five different schools), and an innovative culture to match. Importantly, in Psychology, we had lab classes with lessons in research methods from Week 1, our first assignment was to write a research report, and research evidence was given as the basis for everything we were taught – I was “hooked” from the start. I went on to focus on personality theory and social psychology with a sub-major in social geography, and then, in the 1970s, on the emerging area of community psychology.

Despite that strong research orientation, there was no real awareness of or training in use of qualitative or multiple methods. The '60s was an era when behaviourism and controlled experimentation dominated psychology. We were taught, as much as was possible, to reduce all observations to “objective”, observable measures, to rigorously control threats to validity, and to employ statistics as the primary mode of data analysis.

A critical factor in my later student career was having a supportive PhD supervisor who ‘let me fly’, to learn ‘by the seat of my pants’– taking ideas, and especially methodology, from both psychological and sociological literature. I didn’t have the language to describe it this way then, but my PhD turned out to be a community-based, mixed methods, action research study from which an original theoretical argument and model was developed. Ending with a hypothesis, rather than starting with one, was a very “upside down” approach for a psychology PhD at the time. It meant that, although two US-based community psych profs wrote about it very favourably, the Australian examiner – a clinical psychologist – initially failed it despite finding it conceptually and practically strong, because there were “not enough statistics for an Australian psychology PhD”. A maverick approach can be risky!

With three young children, I moved into a career in community development and then freelance evaluation research. During the latter, I was introduced to a Mac plus, a basic statistics program, and to Matthew Miles! In the 1990s I moved into an academic position where my task was to build expertise and a research culture in a new university, working with academics across all disciplines. In this phase, I discovered and used both SPSS and Nud*ist (as it was then) in my

own research and in training others. I finally ended up in adjunct positions on the fringes of academia, while, from 2000, I spent 14 years running a rural research retreat primarily for PhD students and research teams, and also occasionally leading workshops on qualitative and mixed methods data analysis across Australia and in various places around the world.

I like solving puzzles, and I think that's why I ended up not doing so much of my own research as helping others to do theirs – figuring out *how* they might find out answers to their questions, rather than being so curious about *what* those answers were. Always, my work has taken me along unexpected pathways and has involved me in a wide range of projects – topically, disciplinarily, and methodologically.

My first meaningful encounter with MM literature and language was in the 1990s, consolidated in 1998 at a sociological conference followed by two weeks buried in the library at U Nebraska Lincoln, with reading guided by John Creswell. I followed this up over the next couple of years with meetings and conversations with other mixed methods “gurus” – authors whose work I’d begun reading – Jennifer Greene and Valerie Caracelli, Julia Brannen, Abbas Tashakkori – but I had something to share because I’d already been “doing it” for two decades before that, blending methods in reports and then exploring how I might combine qualitative analyses using Nud*ist or NVivo with statistical analyses using SPSS. I brought a practitioner’s approach to qualitative and mixed methods, always figuring there must be a way I can make “this” (whatever it was I wanted to achieve) work. My final contributions have captured much of what I had learned over the years in writing on practical strategies for analysis.

So what did I learn through my 50+ years of experience

#4 Some insights: What did I learn (1)

- Strong methodological foundations: breadth and depth
 - university study/short courses/methodological literature
 - “craft skills” / critical skills: doing and thinking
 - judiciously break rules to navigate “mess”
- Be part of a research culture
 - collegial conversations, conferences, networks, social media
 - learning, feedback, opportunity
- To combine use of any and many methods/tools/data: the “natural” bricoleur
 - mixing methods long before being told I shouldn’t
 - cast a wide net, challenge trends

The study and research I did as a student, and also later learning through professional development courses, reading, and collegial meetings, gave me a broad methodological base, with strong foundations. For example, in a pre-computer era, we learned to do statistics from the ground up – learning to understand statistical processes underlying the results obtained. If you have strong foundations, understanding the principles and assumptions of what you're doing, then, when you are likely to bend or break those assumptions – perhaps because of sampling constraints, or because you are creating statistics from converted qualitative codes or machine-generated counts of words – (a) you can recognise that you are breaking assumptions, (b) you will understand and know how to compensate for the effects of doing so and, critically, (c) you will know when it is not appropriate to do so and you need to find another way. You are also able to discern when the machine generates results that don't make sense, and investigate why.

Right from the start, also, I was a natural bricoleur. With a problem or topic to investigate, I would always look for any and all methods available to me that I might use to gain insights into that topic. Similarly, it was natural to combine what was learned through those various methods into a topically sequenced narrative or report. Often my results and conclusions, especially for consulting work, would reflect the benefit of having integrated multiple methods, and would usefully extend a client's thinking beyond the immediate remit of the original task.

The lesson for then, for now, and for the future is to develop the craft skills – the knowledge, practical experience, and ethical judgement – that allow one to navigate “mess”, to see emergent patterns and shape methods to suit the evolving study while still engaging in thoughtful planning and developing warranted assertions.

#5 Insights: What did I learn (2)

- Conceptual focus – identify core components/processes
 - clarification of task(s)
 - concepts before methods? (avoid conceptual drift)
 - facilitates modelling/theorising
 - visualisation as a conceptual and analytical tool
- Adopt new technology (thoughtfully!)
 - understand the mechanisms and how they influence outcomes
- Found my own niche
 - puzzles vs answers
 - “rubber hits the road” skills to use/share

I also learned, when doing my PhD, the importance and usefulness of clarifying the concepts I was working with. As I completed each chapter of the thesis, I summed up what could be taken forward from that chapter, often in the form of breaking down and defining of key concepts – such as what was meant by mental health, disadvantage, and community development. When it came time to put together a final thesis, or argument, from what I had learned, I therefore found this was not difficult (just as well, the final model was developed in the last week or so before the deadline) because the connections between inputs and outcomes, and processes underlying those had become obvious, were readily demonstrated with a series of flow charts, and were supported by the extensive literature, data, and results I had gathered.

And again on concepts: in 2007 I was given Gary Goertz' book on *Social Science Concepts* to review for JMMR. Goertz was concerned, amongst other things, that researchers often operationalised concepts before properly theorising them (the classic e.g. from my undergraduate career being that intelligence was what intelligence tests measured). Operationalising before theorising can lead to conceptual drift, where what is measured is no longer quite what was intended. I found his work explaining a multilevel multidimensional approach to concept definition, differentiating between an essentialist and a family resemblance model of concepts, and the intension and extension of conceptual definitions greatly refined and enriched the work I was doing.

I always had a very down-to-earth approach, which often involved breaking complex questions and tasks down to their component elements, as part of “getting my head around them”. I particularly disliked obfuscating, longwinded, and unnecessarily repetitive language – as some whose journal articles I reviewed discovered. I'm sure it was my liking for a practical, puzzle-solving approach that led into my final career choice of being a methodological trainer–consultant, and to setting up The Research Farm.

So, how were these insights relevant to mixed methods research?

#6 MMR – applying insights to issues

- Challenge trends and methodological fashions
- (Reject) reification of quantitative–qualitative differences and consequent siloing of methods
 - different data (e.g., numbers, text): different means to represent same observed phenomenon – all require interpretation
 - family-resemblance-type multidimensional continuum: supports working “naturally”

- Paradigms (ontology and epistemology), theoretical perspectives:
 - coherence vs division
 - association with methods? methodologies?
- Focus on integration: beyond simple combination to interdependence – now mainstream!

I've always been inclined to buck against rules that don't make sense to me – and that includes in the mixed methods context: rules for example about classifying methodologies as qual or quant to ensure both are included; about developing research questions guided – or results structured – by methodology rather than by the components of a topic; and more recently, about the promotion of joint displays as the be-all and end-all of mixed methods analyses – generally, then, I've had some issues about what “must” be included for work to qualify as mixed methods. I can understand the need to set guidelines for inclusion in a dedicated journal, but I object when they extend beyond that.

Historically, researchers have effectively and intentionally combined field observations with measurements, verbal description with statistics, or used mixed-mode case studies, epidemiology, and/or surveys to answer a research question – as I had done – unproblematically integrating these and without labelling their studies as being multimethod or mixed. Methods used in social research regularly and often inherently ‘boundary-cross’, combining some aspects, at least, of characteristics normally attributed to the other; for example, using numeric data inductively, statistically analysing counts derived from text, combining multiple methods in an ethnography. And doing so is becoming increasingly common in the new era of big data and large language models. By demanding a combination of definable qualitative and quantitative approaches, the modern mixed methods movement has unnecessarily emphasised and accentuated differences between them.

It is more helpful to see that elements of qualitative and quantitative methods and methodologies exist on a permeable multidimensional continuum rather than in silos – a bit like a pond in a field with a broad muddy boundary in between, or two interrelated families. Rather, then, than specifying essential attributes, an approach can be viewed as qualitative and quantitative if it is positioned at, or near, “enough” dimensional poles deemed characteristic of that approach to create a family resemblance. Many or most will lie somewhere in between.

It is also helpful to see that data, regardless of type, are used to represent our observations – they are constructions that point to phenomena we may or may not believe to be real. The division between methods was further complicated by the tendency to associate particular approaches or methods with philosophical paradigms – and still is by some. Paradigms were not discussed when I started out as a researcher and I did not even meet the term until I began reading the mixed methods literature in the late 1990s. That, incidentally, did not stop me from

being an effective researcher. It then took me about 15 years to understand enough and figure out a position with which I was comfortable. Doing so is helpful to integration because the beliefs you hold about what is real, and how to investigate that, provide coherence of perspective regardless of the type of data involved.

There were many other insights with relevance to mixed methods research, but the final one I want to focus on here is the one that has consumed most of my attention over the last 30 years or so. 30 years ago, when I started playing with computer strategies for integrating methods, most discussions about integration went no further than simple combinations of qualitative data or results with statistical data, occurring at a particular point in time and with these kept strictly separate until that point. I started writing about integration and providing guidance on how to achieve integration of text and numeric data using either crosstabulations in software for QDA (NUD*IST) – producing something similar to today’s joint displays – or conversion of codes to variables which were then transferred to SPSS for further analysis and blending with other data. Given the state of software development at the time, neither of these tasks was straightforward. Now they are – although there seems to be still some way to go before they are used as a mainstream strategy.

And, just as people like John Creswell, Greg Guest, and others have attempted to identify critical variables within design and the different ways they might be combined, over time I identified core strategies within the multiple ways that researchers have integrated data and methods – and have written and spoken extensively on the subject. I am happy to say that now it has become mainstream to regard integration as a critical element in a mixed methods project, and to see integration between methods as an often iteratively developed interdependence between methods. How much I contributed to that shift, I will leave for others to judge.

How do these various insights help with navigating the poly-crisis?

#8 Navigating the poly-crisis?

- New data, new methods
 - further blurring the boundaries between types of data and approaches taken
 - and reinforcing a lack of rigidity in defining these.

I have talked about the need to

- Develop flexible craft/critical skills, with strong foundations, in this era of complexity.

These are important because:

- constant change, and new developments require preparedness to challenge traditions, and to evaluate and learn new methods and techniques
- emergence, uncertainty etc requires preparedness to modify design and openness/flexibility/adaptability in choices of methods

And you need:

- determination to overcome challenges

So, has the maverick become mainstream?

Stephen Gorard argued that “in most real-life, curiosity-driven research, the research question or questions entail a wide range of data being collected and synthesised ...[and that] If methods are used naturally in combinations as the [questions] demand, then there is no need to mix methods because there has been no separation in the first place”

#8 Maverick to mainstream?

From being an outlier:

- MMR has become a ‘natural’ choice!
 - complexity (multi-disciplinary; multi-level) requires skills in managing, analysing, and integrating multiple and diverse datasets and methods
 - encourages open vs rigid thinking, flexibility and adaptability regarding data and methods
 - focus on integration as interdependence between approaches and methods
 - offers a more useful notion of what is a solution (e.g., warranted assertion rather than proof; mechanisms vs associations)

But we (i.e., you) still need to:

- Be prepared to “go out on a limb”
 - learn important lessons from the past, understand and challenge current trends, imagine the future
- And, perhaps
 - the strategies and ideas you develop through the challenges you face could become mainstream, ready for new challenges and challengers!

Find your passion, and enjoy it! And finally – a thought from a social reformer:

“To better the future we must disturb the present.”

(Catherine Booth, co-founder of the Salvation Army)