



SYMPOSIUM "PERSONAL ENCOUNTERS WITH SERENDIPITIES"

Serendipitous Interpretation from a Fresh Empirical Occurrence

Charles Crothers

charles.crothers@aut.ac.nz

Robert K Merton (RKM henceforth) defined serendipity as the event of observing an unanticipated, anomalous and strategic datum which becomes the occasion for developing a new theory or extending an existing theory. As with much of his sociology of science, a slew of examples from the natural sciences are outlined. However, there is a paucity of social science examples. It might well be expected that the social sciences (and even more the humanities) are infrequent amongst such examples since it is the disciplined reaction of the discoverer which is crucial in their creation and it is quite possible that the social sciences lack sufficiently precise frameworks for interesting recognition to occur. Merton points this out in his 'Note on Serendipity in the Humanities' (Merton, 2004: 223-229). My short contribution to *Serendipities* provides a case study of a serendipitous occasion, in a social science context, to complement RKM's concentration on natural sciences. It also discusses technologically-enhanced serendipity-seeking.

It is important to pin down the ways in which the social sciences and humanities differ from the natural sciences in terms of the potential operation of serendipity. Merton says (2004: 223) that

Though collectors [of items of literary and historical interest – e.g. as in archive] and literary scholars ...have to be prepared to make accidental discoveries – they must know in a general way where to look and what to look for – their stock of knowledge does not have the systematic quality of science, and the fact of their preparedness may, consequently, be less visible. Also, the nature of the happy accidents that befall them consist, frequently, of unexpectedly locating a desired item or of the un hoped for anticipation of others in the recognition of a valuable item; the human drama of such events may serve to conceal ... the knowledge and effort necessary for making the discovery.

So, the key point is finding further material with which to stretch and fine-tune a theory or its statement of the conditions under which it operates, rather than to generate a 'freshly-minted' full-blown theory; moreover, the creative moment (cf. Koestler, 1964) is more likely to be muted.

I've been puzzled for some time (probably a few years) about the double-word term 'the science' as used in phrases such as:

- What is the science on dolphin reproduction?
- Do we have enough science to develop a plan for fish production?



Then I happened to hear someone at a political science conference that I was attending say ‘the literature on this says XXX’ and the story of these linguistic usages snapped into place. I realised that this was a synonymous-meaning phrase that I was more familiar with. I am not sure why my mind made the link at that time, since it was not at all obvious, but perhaps it arises from a cultivated mental habit of trying to place matters alongside each other and to spin out the consequences of co-locating them in my mind. I am much more familiar with the latter usage, and feeling ‘at home’ with it, I was then able to reach out and comprehend the other term. What follows is an analysis in a more developed form.

Both usages are more jargonistic, narrower versions of the common-language inquiry ‘what do we know about X’?. This usage is appropriate across a wide range of settings.

By asking what is ‘the science’? An applied setting is more likely to arise, especially where one can draw policy implications of scientific knowledge. The term implies a knowable body of knowledge about some portion of nature. Behind it lurks a hard-edged meaning; the science is seen as bounded, finite and existent. It suggests the possibility that the quantum of knowledge might be measured. However, the efficacy of the science can be qualified against what needs to be known - so gaps still requiring to be filled might be identified. The amount of knowledge to which this points is not disciplinary or field-specific, but rather an amalgam of whatever parts of science are relevant. It does, however, often exclude the social sciences, unless specifically mentioned and might, in some cases, include social knowledge. The science is animate, it has a voice and is almost ready to come to life. However, the location(s) in which this science resides are not specified, but left hanging. Presumably, appropriate scientists can be consulted who will [can?] provide this knowledge. It exists in the minds of the network of scientists with expertise in a particular [given] area, although on its own the phrase is unclear as to where the body of knowledge actually lies beyond this broad image. In contrast, the literature is more inert, emphasising where the science is located; in a library (or possibly in an electronic storage system). While it may be possible to get this literature up and running, clearly it will take more effort to do so. There does seem to be a tendency to site ‘ready for action’ in the minds of the networks with access to this knowledge. Within this, there lurks the idea that such science might reside in an underlying scientific literature, presumably sitting within a web of journal articles. However, it may also be possible to convey what ‘the science’ is through summary treatments, especially diagrams or other visual forms. ‘The Science’ is seen as possibly arguable, but generally sanctified; it is stamped with authority that flows from its carriers.

‘The science’ (with a small ‘s’) contrasts with the more general use of ‘Science’ (with a capital ‘S’), which is a far more general reference to an institutionalised activity. The image of science is – to some extent – populated with people; white-coated lab assistants in lab settings and bearded, thoughtful, pondering professors. It is a distanced image.

In the social sciences (and perhaps the humanities) it is more common to refer to ‘the literature’. Phrases might include asking a postgraduate thesis student about to embark on research what is the literature in their chosen area. This knowledge is much more ‘physically’ located in a set of journal articles and books, whose configuration can be described. The implication is that the specific knowledge remains rather more ‘distributed’ across this array of more general knowledge and that summative versions cannot be readily wrought, this being the task of a scholar in developing their specific literature review of a given area. The body of knowledge is more inert, not so likely to provide a springboard for policy consideration. In contrast to what I have said earlier about ‘the science’, ‘the literature’ implies a more scholarly mien; inhabiting libraries, combing

through stacks of journals and building up a somewhat personalised account of what is important with an emphasis on diversity within the field of knowledge and within particular summaries deriving from this.

These differences in usage seem appropriate in terms of what we know about these different bodies of knowledge. In ordinary life, knowledge can be acquired from a variety of sources. ‘The science’ refers to a more active and sanctified portion of applicable knowledge, whereas ‘the literature’ implies a more passive compilation. ‘Science’ (or its more extended form ‘Knowledge’) provides the more general setting.

My second point concerns the environments, (a crucial point in Merton’s self-exemplifying exegesis in his afterword – 2004), in which serendipity might occur and in particular the effects of technological change within them. Google Scholar has as its permanent ‘header’ the injunction ‘Stand on the Shoulders of Giants’, the provenance of which Merton spent so much time eliciting. But google (and other search engines) are serendipity generators of a high degree, to a point where the unintended material adduced is both overwhelming and annoying. There is even an ‘I’m feeling lucky’ option, which is purely random.

It was interesting to find this conception of a serendipity-machine spoken of by someone participating in a focus-group study on the internet – the respondent was asked to depict their use strategy. The response was:

I think I'm a functional explorer – because on my use of the internet there's really practical purposes just to make my life easier, paying bills and banking and all the kind of stuff, but I actually use it a lot for research and exploring possibilities, learning and like sometimes like the serendipity of start with a link and click in another link and click in another link and see where it takes you, and that way you end up on YouTube, or on somebody's blog or you end up in multiple places – so I really like that kind of exploring kind of thing, for fun and learning and then for practical purposes, like if you're planning a holiday and then you can figure out where you're going to go and book the best hotel.

This is a more technologically sophisticated version of Glaser & Strauss’s (1967) methodological admonition to see libraries as a similar serendipity-machine:

..the library researcher cannot help but stumble upon useful comparative data. He (Sic) is checking through the *Readers Guide* on one topic, when happily his eye lights on another relevant topic about when he never thought – or he wonders about an article with an intriguing title, and in checking it finds marvellously rich data. He ransacks books strung along several shelves, and not only finds books – perhaps even more useful – either as he walks toward those shelves or allows himself to browse through books on neighbouring shelves. Or after reading a magazine article which he has tracked down, he allows himself sufficient time to riffle through the remainder of the magazine (ibid: 174).

Technology also provides us with entries in a range of blogs and other information sources which may yield quickly-harvested and interesting information. Wikipedia informs us that [serendipity] “... was voted one of the ten English words hardest to translate in June 2004 by a British translation company”, although it does not go on to inquire why this is so, and the reference seems to have vanished into the nether realms of ancient websites.



Despite this difficulty, the Wikipedia entry goes on to suggest that “...due to its sociological use, the word has been exported into many other languages” and then in a footnote lists: “For example: Portuguese *serendipicidade* or *serendipidade*; French *sérendipicité* or *sérendipité* but also *heureux hasard*, “fortunate chance”; Italian *serendipità* (Italian Dictionary Hoepli, cfr.); Dutch *serendipiteit*; German *Serendipität*; Japanese *serendipiti* (セレンディピテイ); Swedish, Danish and Norwegian *serendipitet*; Romanian *serendipitate*; Spanish *serendipia*, Polish: *Serendypność*; Finnish *serendipiteetti*”. Again, the mechanism of the “sociology effect” is not spelled out – although perhaps it is an indication that sociologists in these countries (or more technically writing in these languages) have translated and then used the term.

Finally, we are informed that since “Serendipity is a key concept in *competitive intelligence* because it is one of the tools for avoiding blind spots” chance has been turned into a tool in a social technology.

Returning to Glaser and Strauss, (1967) they raise the methodological and theoretical implications of the concept, which Merton did not revisit after having posited the methodological role of the serendipity pattern in the mid-1940s. Glaser and Strauss (ibid: 2 fnt 1) tartly distance themselves from Merton: “Merton never reached the notion of the discovery of grounded theory in discussing ‘the theoretic functions of research’. The closest he came was with ‘serendipity’....that concept does not catch the idea of purposefully discovering theory through social research. It puts the discovery of a single hypothesis on a surprise basis. Merton was preoccupied with how verifications through research feed back into and modify theory. Thus he was concerned with grounded modifying of theory, not grounded generating of theory”. And they have a point. Although their widely popular methodological practise was itself generated in part from Merton’s methodological concerns, they did add a further more active element.

Finally, the theoretical circle needs to be closed. Throughout his career, Merton was fascinated with social structure. He complemented this with an interest in anti-structure or chance; the ‘flip-side’ of his structural interest. Structure at a broad abstract level concerns the reduction of chance and resilience (or lack of resilience) in taking advantage or coping with opportunistic events. So, one can see that this whole area of discussion relates back to the heart of Merton’s sociological concerns.

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Charles Crothers is Professor of Sociology in the Department of Social Sciences at Auckland University of Technology, New Zealand.