Policy as Science
Scott Findlay

In 2007, I attended a workshop to celebrate the 20th anniversary of the Bruntland Commission's publication of "Our Common Future". During a panel discussion devoted to a retrospective analysis of the impact of Bruntland on public policy, the audience was pinned down by a perfect fusillade of references to "the policy process". Bleeding from a dozen wounds (granted, mostly superficial, or so it seemed at the time), I pleaded for clemency. Said I: "I am but a humble natural scientist, so please forgive my ignorance, but what, precisely, is the policy process?"

"Thank you for the question," said one of the panelists, after only the briefest of covert glances heavenwards (in supplication, I suspected), "most scientists (I presume she meant natural scientists) don't understand the policy process."

"Assuredly," said I. "You see before you another lost lamb, more to be pitied than censured. Shepherd, my shepherd, save me from the unknown perils of the policy wilderness!"

Twenty minutes later, I was still lost, but less concerned about being so. Why? Because "the policy process" was, apparently, something that (natural) scientists don't engage in, or if they do, their job was solely to pack some of the ingredients from cold storage, like so many overtrained pack mules. But they were underfoot in the kitchen, where the policy process unfolded in strange and mysterious ways its wonders to perform.

Fast forward five years. Scene: a workshop devoted to the role of science in government decision-making. The air is redolent of "the policy process" – more familiar now, but still as tantalizingly mysterious and seductive as ever. Yet today there is a faint hint of promise in the air: perhaps today will be the day of enlightenment!

No such luck. "What we don't want," said one commentator, "is amateur hour. We don't want scientists doing policy, and we don't want policy makers doing science."

A policy, in my understanding (and with, admittedly, some assistance from the Shorter OED (5th ed., 2002 – outdated, yes, but surely the world is not that different a place, lexicologically speaking) is a course of action or set of adopted principles designed to achieve a desired end. Now, every volitional action, individual or collective, is based on expectations. In scientific parlance, this expectation is a prediction, derived from one or more underlying causal hypothesis linking action to outcomes. Hypotheses and predictions are not only the lifeblood of science, but the lifeblood of everyday decision-making: as Thomas Huxley noted, the scientific method is nothing exalted, it is merely the normal working of the human mind. And any problem that involves, even implicitly, the Yin and Yang of cause and consequence is one for which the scientific method is of surpassing relevance.

Perhaps a scientist like me – somebody formally schooled in the workings of common sense – can shed some light on what the policy process is, or should be?

Most policy with which I am familiar is an attempt (i.e. a course of action) to modify individual and/or collective behaviour to achieve some desired outcome. Such interventions are based on (invariably implicit) causal hypotheses about the factors determining human individual or collective behaviour, or their consequences. There are then four critical questions:

1) What are the outcomes we want to (a) achieve; (b) avoid?
2) What are the hypotheses underlying a given candidate policy option? In other words, if we predict that policy X, if implemented, will result in desired outcome Y, but will not lead to undesired outcome Z, what are the hypotheses from which these predictions are derived?
3) What is the evidence that the hypotheses in (2) are true? And, last but not least,
4) Insofar as the success of the enterprise depends on these hypotheses being true, what are the consequences if they are not true? After all, as Lord Bolingbrook observed, while truth may indeed lie within a narrow and certain compass, error most certainly does not.

If policy is a course of action to achieve a desired end, then "the policy process" must be the process by which this course of action is determined. A rational policy process would then be one that selects among candidate policies in a rational manner. One – probably naïve, possibly intemperate – suggestion is that we ought to make an effort to select that option which is more likely to achieve desired outcomes, and less likely to achieve undesired outcomes. How do we determine these likelihoods? Through the process outlined in (1) – (4) above. What is this process? Why, it's a scientific process. Indeed, scientists have had a name for it for it since the Renaissance: it's called the scientific method.

Hmm, maybe we do want scientists doing policy after all – or rather, policy makers who think like scientists.