

# A Science Policy Ethic





Building Support for Public Science in Canada  
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## Science Policy Defined

The field of policy development and the emerging policies that provide guidance on how science can and should be:

- governed (who has say?) 
- fostered (is it a “go”?) 
- inhibited (wait and see?) 
- managed (how to do it?) 

## From Policy to Ethics

Policy development needs to build on evidence, but it also requires judgment (prioritizing, balancing, compromise, ...)

and these latter activities are guided by *implicit* or *explicit* values and ethics



## A Note on Ethics Denial



- There is no ethics content
- It exists, but cannot be dealt with
- Can be dealt with, but should not be done by us
  - Let the ethicists do it (the clergy model)
  - Let the politicians do it (representative democracy)
  - Let the public do it (the market model of ethics)
- Should be done by us, but we don't want to / dare
- We are doing it but we don't want to admit it ...

## Should All “Ethics” Be Explicit?

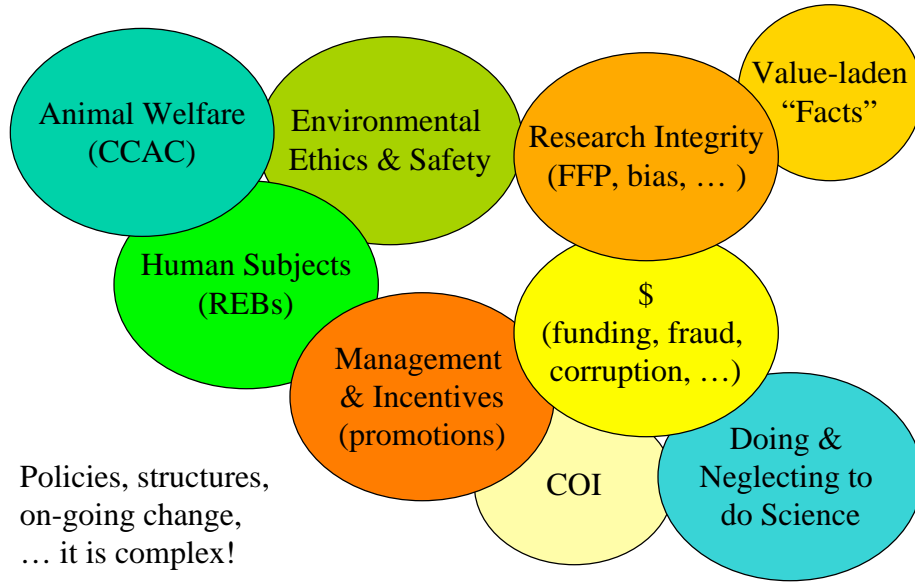
- Yes and no – a tactical issue
- But: we need to deal with ethics somehow
- And we need to do it early (first things first)



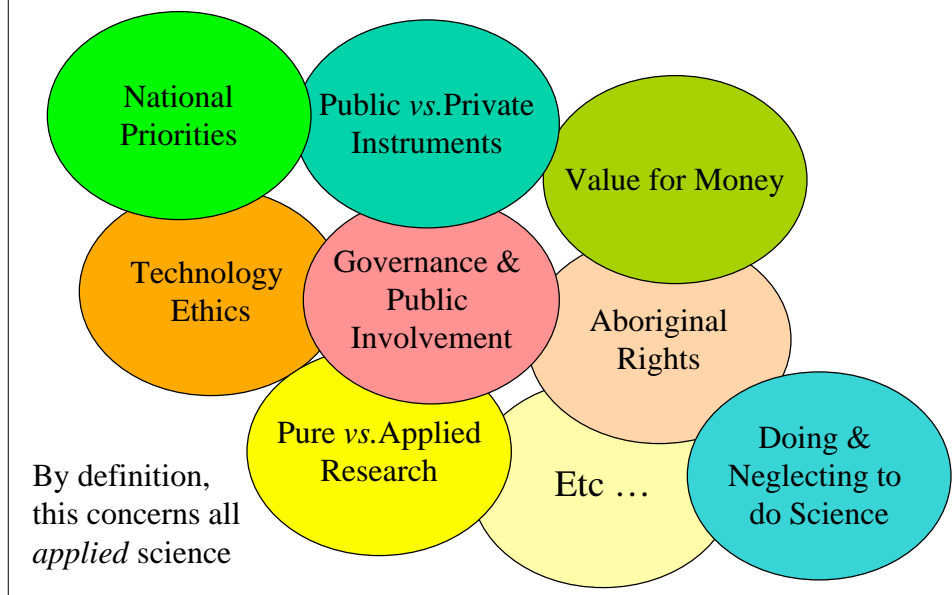
## The Challenge

- Ethics is pervasive because judgments are everywhere
  - The ethics within science are complex
- To many people, science is a mere *tool* – decisions about science depend on judgments about the uses of science
  - The ethics surrounding science are very complex

## Samples: Ethics “Within” Science



## Samples: Ethics “Around” Science



## Addressing the Challenge

Is there a simple, unifying “ethic” that could be formulated to guide science policy?

- And, if so, could such a simple ethic be of practical use in decision-making?
- And, if so, could it supplement or even trump the existing “ecosystem” of implicit and explicit ethics?

## Inspiration from Environmental Ethics



- *The Land Ethic* (formulated by a scientist)
- Its success was unexpected
- It is deceptively simple
- It is practical
  - (Example: *Canada National Parks Act*)



## On 'Utility'

- Aldo Leopold immediately goes on to say:
  - “It of course goes without saying that economic feasibility limits the tether of what can or cannot be done for land. It always has and it always will.”
- Science policy is currently focused on (e.g.):
  - Potential for innovation & commercialization
  - International excellence and building on strengths
  - Value for money in science for regulatory decision-making and policy development
- The importance of utility is uncontested – but “utility” alone cannot cover all important values

## From Formulation to Implementation

### 'Integrity'

- A concept that represents the elements of “ethics within science” and the importance of a strong, incorruptible science culture
  - It's helpful to link “integrity” to the culture of science rather than ethics bureaucracy, regulation or policing.
- **Implementation:** Test, integrate and foster existing ethics standards and foster the culture of science.

## From Formulation to Implementation 'Stability' (~ Resilience)

- Stability should be understood as dynamic, adaptive stability (the word “resilience” may be helpful)
  - Consider the cost of a “roller coaster approach”
- Also, consider the idea that the “enlightenment project” may represent a value-in-itself
- **Implementation:** Think ahead and be mindful of the costs associated with frantic swings in science support.

## From Formulation to Implementation 'Beauty' (~ Attractiveness)

- Beauty may sound somewhat flakey (“attractiveness” may be a more practical term)
  - Remember what gets young people into science
  - Why not attend to the personal fulfillment of those who practice science?
- The need for current and future capacity in science is a very clear and basic need within the scientific enterprise
- **Implementation:** Permit this perspective, integral to workplace quality, future capacity and, ultimately to the utility, integrity and stability of the scientific enterprise.

## A Supplement or Replacement?

- The Science Policy Ethic cannot be a replacement for the existing “ecosystem” of policies and values.
- But a dialogue over its use would be valuable as:
  - A simple, easy-to-remember guiding and test principle
  - A tool in discussion, to render the implicit focus on “utility” explicit and to test its validity

## Concluding Remarks



1. One cannot (or should not) argue against the need for science policy to be useful and mindful of results.
2. However, the current implicit approaches are focused narrowly on utility (with a nod to integrity).
3. Public science *can* be defended based on utility alone, but the inclusion of the values of stability (in the context of the enlightenment project) and beauty (in the context of, at least, workplace quality) are worthy considerations.
4. This broadens the utility focus and allows for an explicit discussion over what is at stake.
5. I believe, there is value in simplicity and the testing of Leopold’s values in the science policy context.

## Science Policy Ethic

Select those science policy directions that tend to preserve or foster the integrity, stability (resilience), and beauty (attractiveness) of the scientific enterprise.

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(Because this approach ultimately translates into utility and personal fulfillment of those who practice science.)