

*Knowing what we are talking  
about: Why evidence doesn't  
always travel*

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# My central topics

# What makes

Studies that show the efficacy of a particular policy/  
programme/treatment

**good evidence** for the prediction that

That policy/programme/treatment will be effective if  
we implement it?

# Two philosophers' refrains

1. Let's get straight what we are talking about.
2. Let's get straight what makes  $e$  evidence for  $h$ .

# What are we actually claiming when we say 'It works'?

- 3 distinct kinds of causal claims:
  - a) It works somewhere.
  - b) It works: it plays a causal role 'widely'.
  - c) It will work here.
- It seems all too easy to conflate these:

# Duflo and Kremer: 'Use of Randomization in the Evaluation of Development Effectiveness'

“The benefits of knowing **which programs work** ...extend far beyond any program or agency, and credible **impact evaluations**... can offer **reliable guidance** to international organizations, governments, donors, and...NGO's beyond national borders.”

■ **Which programs work** = it works 'in general'

■ **Impact evaluation** = it works somewhere

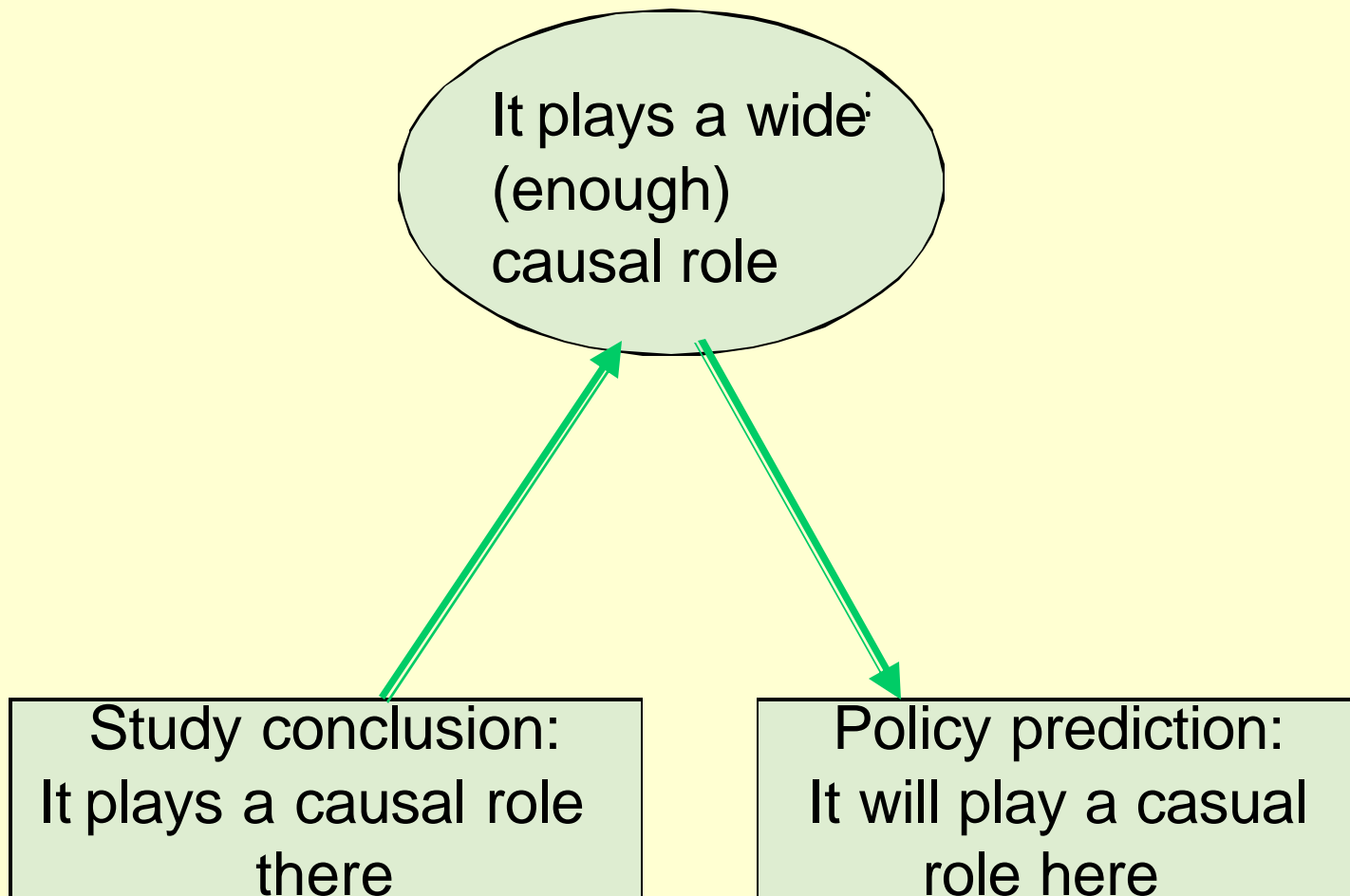
■ **Reliable guidance** = it will work for us.

- SO....3 distinct kinds of causal claims:
  - a) It works somewhere.
  - b) It works: it plays a causal role 'widely'.
  - c) It will work here.
- a) is the kind of result we can establish in an RCT.
- c) is what we want to know.

How does a) become evidence for c)??

How else but via b)!

# Flow of evidence



# Problem 1 for the flow of evidence

Getting the requisite supporting factors –

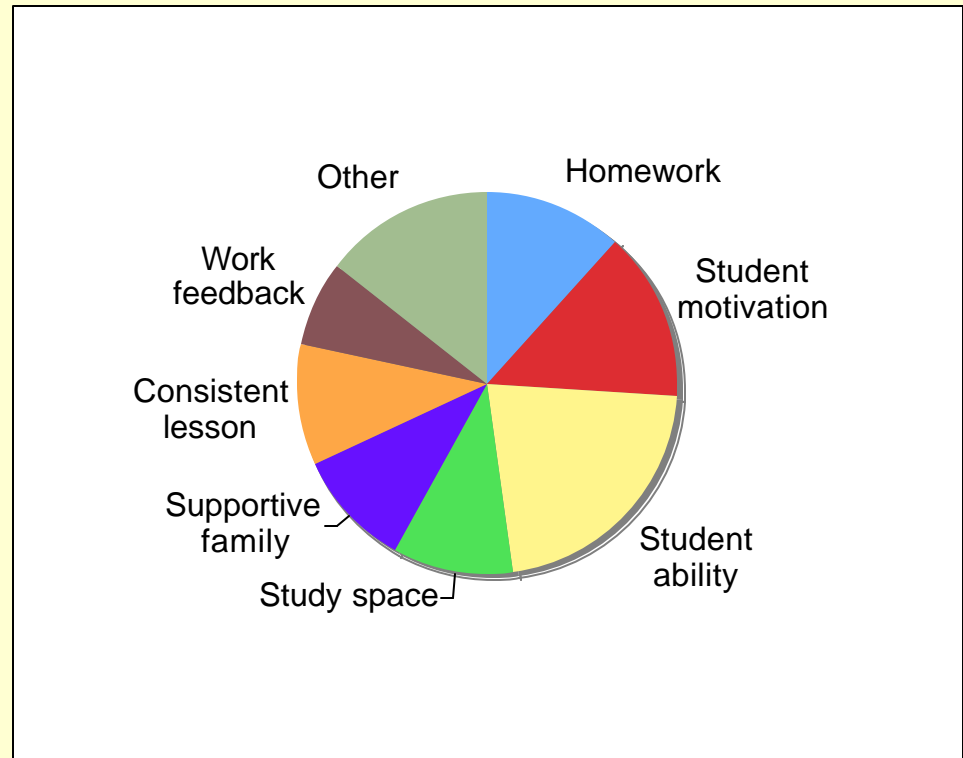
And warranting that you have them

# Support factors

- What we identify as a cause seldom is enough on its own.
- Causes need the right support factors to enable them to act as expected.
- California class-size reduction failure.
- Or homework, ala Harris Cooper.

# Cooper on homework & test scores

- Homework is one factor contributing to higher test scores.
- Other factors are necessary to ensure that homework is maximally effective – Harris Cooper’s “moderator conditions”.
- These include student motivation, student ability, having access to a proper study space, a supportive family, getting a consistent message from teachers and parents, and receiving teacher feedback on assignments





## Edward Leamer Taking the 'Con' out of Econometrics

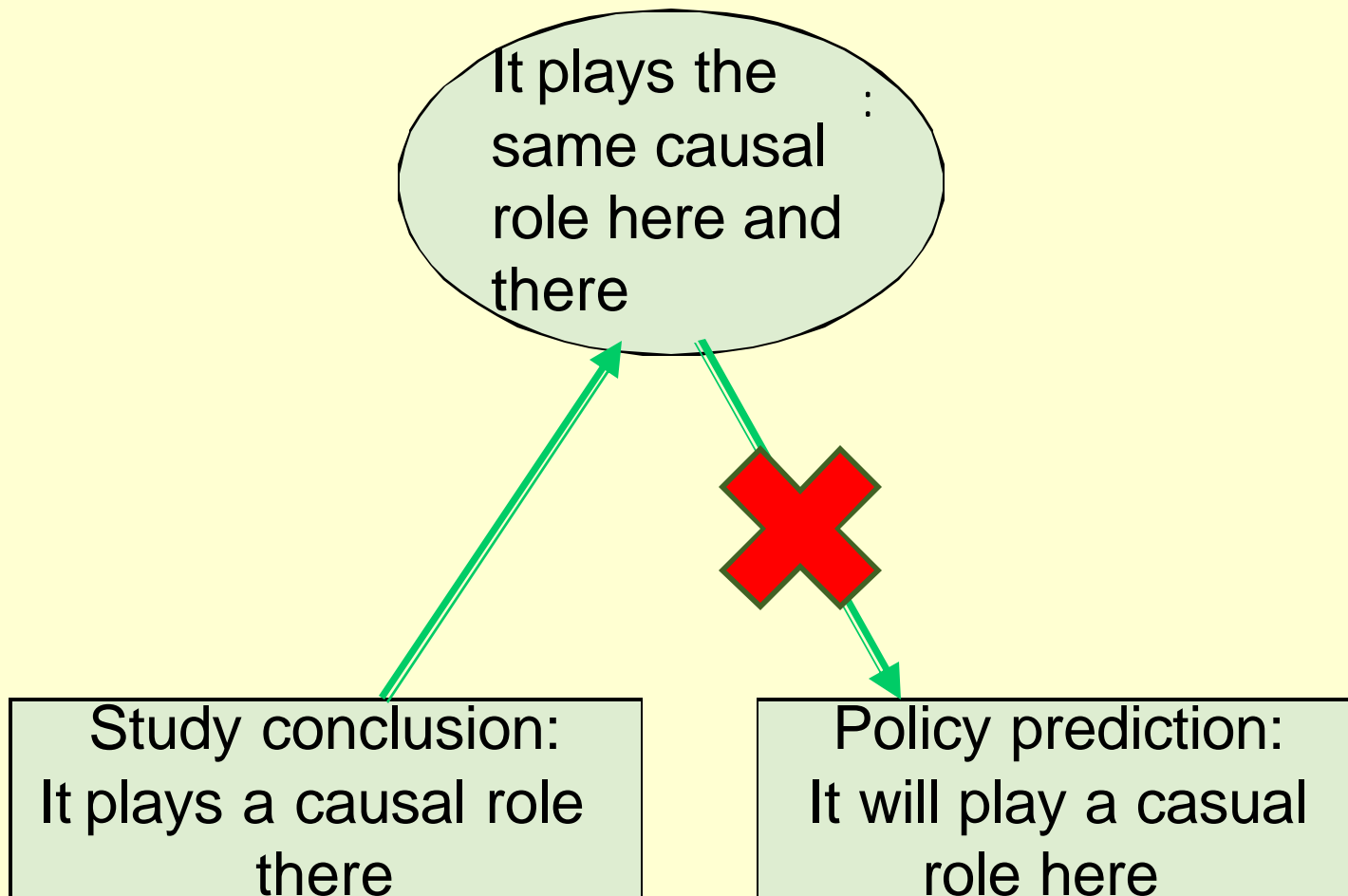
# Leamer on the results of RCTs and the problem of missing support factors:

‘Absent observation of the ... [support factors], what is estimated is some kind of *average* treatment effect...

...which is a little like the lawyer who explained that when he was a young man he lost many cases he should have won but as he grew older he won many that he should have lost, so that on the average justice was done...

...If little thought has gone into identifying these possible ...[support factors], it seems probable that little thought will be given to the limited applicability of the results in other settings.'

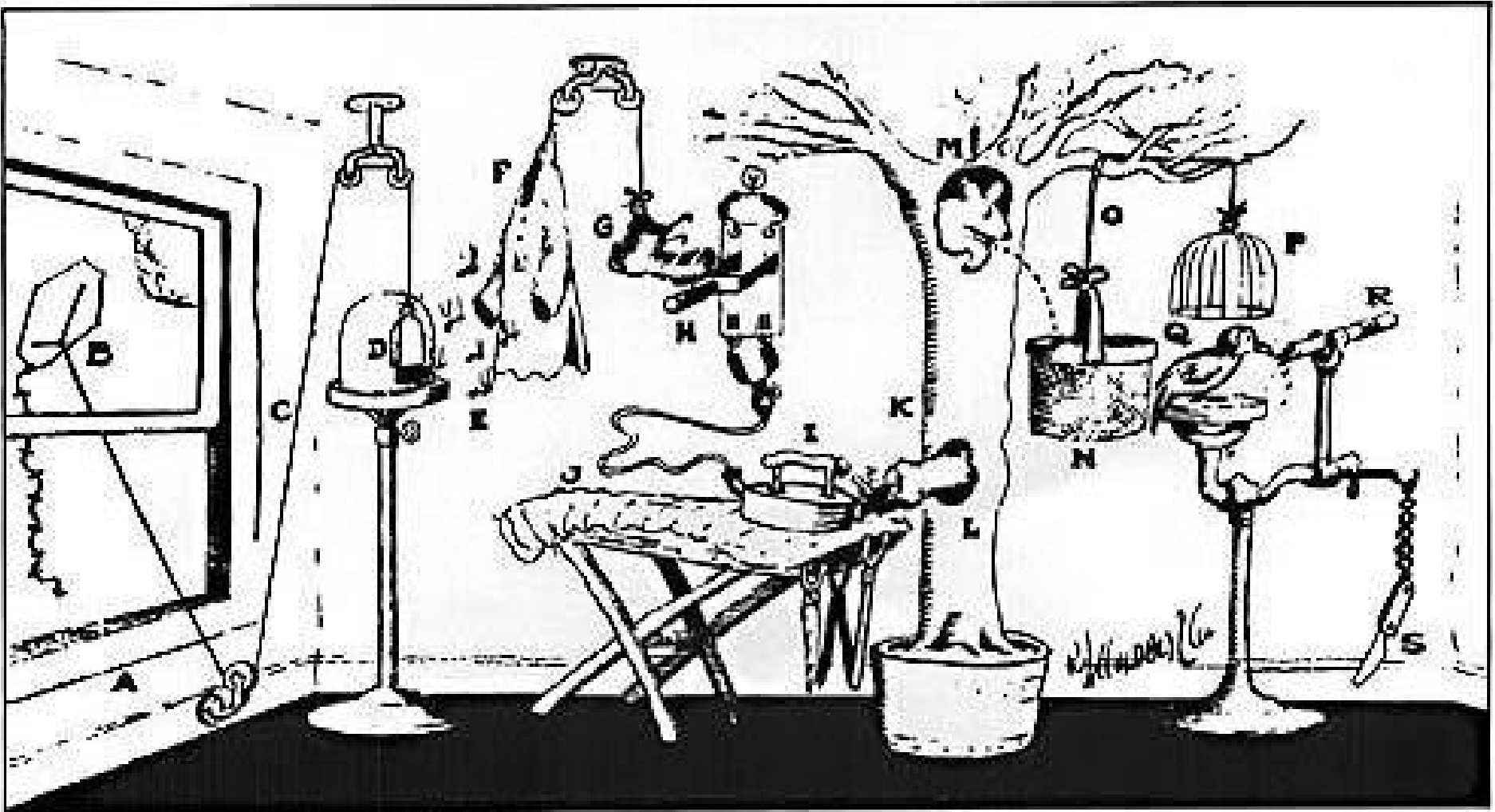
# Flow of evidence absent warrant that the support factors obtain



# Problem 2 for the flow of evidence

Getting a shared causal role –  
And warranting that you have it

The causal roles that features play  
are local



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Flying a kite at A sharpens the pencil at S

# Locality: Bangladesh Integrated Nutrition Project vs the Tamil Nadu INP



Bangladesh

Tamil Nadu

# Big problems in Bangladesh

- Male shoppers
- Mothers-in-law

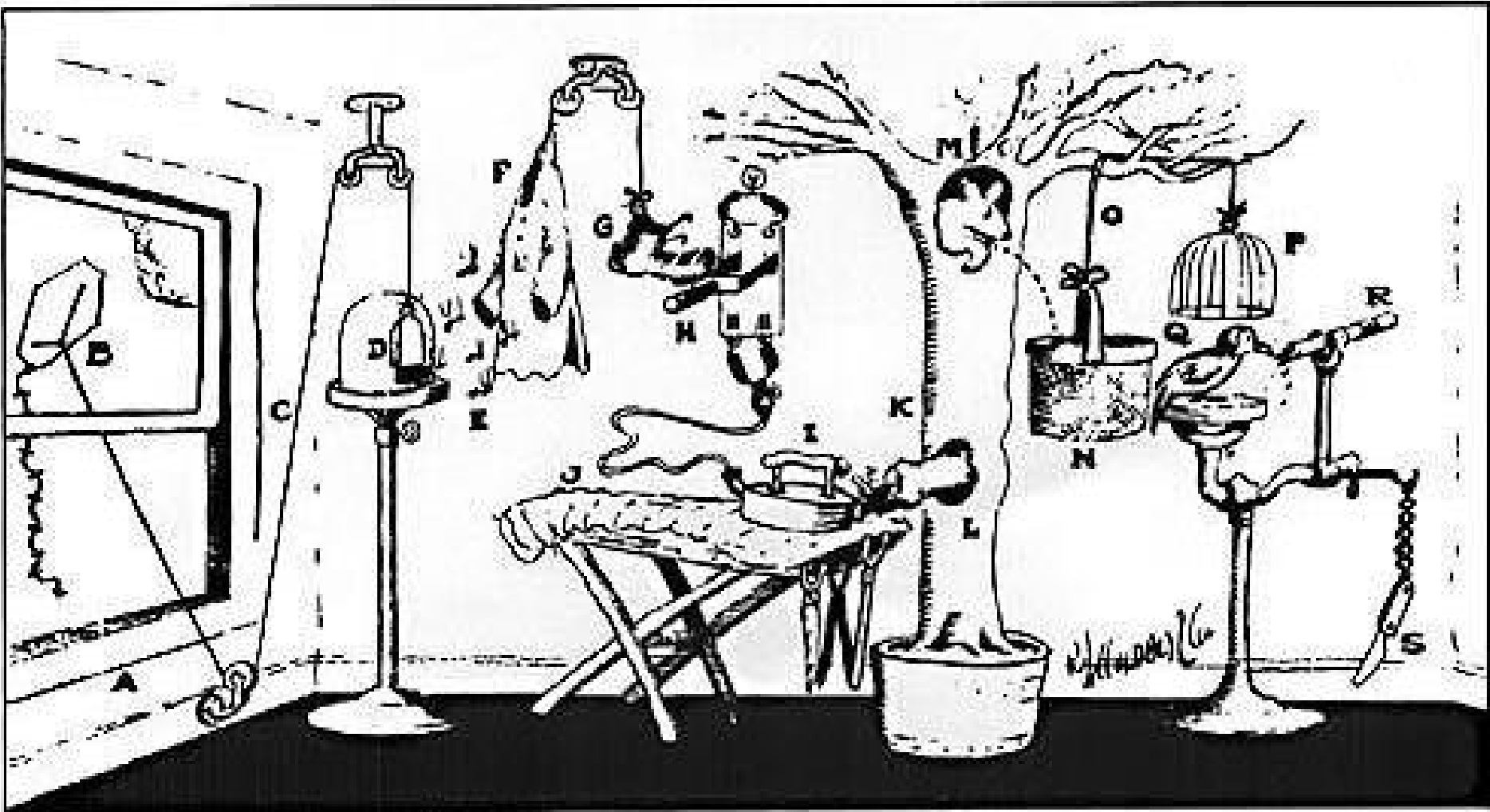
Howard White (from the evaluation team):

'The program targeted the mothers of young children. But mothers are frequently not the decision makers, and rarely the sole decision makers, with respect to the health and nutrition of their children...

...women do not go to market in rural Bangladesh; it is men who do the shopping. And for women in joint households – meaning they live with their mother-in-law – as a sizeable minority do, then the mother-in-law heads the women's domain.'

**BUT** both the Rube Goldberg machine and TINP work because of features that *do* play a wider causal role.

[BINP just didn't identify the right features!]



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# Rube Goldberg

1. Pulling on one end of a pulley rope lifts weights at the other end.
2. Breaching a closed container allows the contents to escape.
3. Moths like to eat flannel.
4. Reducing the pull on one end of a pulley rope lowers objects on the other end.

...

...

# What plays the same causal role for TINP and BINP

Better nutritional knowledge results in better nutrition for a child **in those who**

1. **control the food procured**
2. **control how food gets dispensed, and**
3. **hold the child's interests as central in performing 1. and 2.**

To find shared causal roles  
we need to find the  
**right concepts.**

# Irony of methodology

- Good scientific procedure for testing causal claims requires narrow, concrete descriptions of treatment and outcome variables.
- But causal roles that are widely shared often involve far more general, abstract concepts.
- And the appropriate concretization/ operationalization of those abstract concepts can look very different from situation to situation.

Recall: In both BINP and TINP (we assume)

Those who

1. control what food is procured ,
2. control how food gets dispensed, and
3. hold the child's interests as central in performing 1. and 2.

Can, with 'proper' knowledge, play the same causal role in improving a child's nutrition in both Tamil Nadu and Bangladesh

In Tamil Nadu, 'mothers' satisfied the general description of 1., 2., & 3.

But not in Bangladesh.

# Conclusions

- Good studies **can provide evidence** that a policy will work here.
- They can do so **IF**
  - a) The policy plays the same causal role widely [enough to cover both here and there].
  - b) All the support factors necessary for the policy to operate are present here.
- And to be warranted in predicting that the policy will work here, **we need evidence that a) and b) hold.**

The chart of evidential support ....

# It will produce improvements here

The helping factors for it are  
 $w, y, z$

We have  $w, y, z$  here

It plays a causal role here

?

?

?

?

?

?

?

It plays the same role here and there

It plays a causal role here (and there)

?

S  
T  
U  
D  
Y

R  
C  
T

R  
C  
T

It will produce improvements here

It plays a causal role  
here

It plays a causal role  
here (and there)

R  
C  
T

R  
C  
T

- Without the missing bits, even great studies can not support policy predictions.
- We are likely to get not just policies that **Lean a bit.**
- But ones that **Collapse entirely.**



Thank you!