

How to Write About Numbers

Session 1: Introduction

A workshop in the series Policy Analysis 2010
for Istituto Regionale di Ricerca della Lombardia

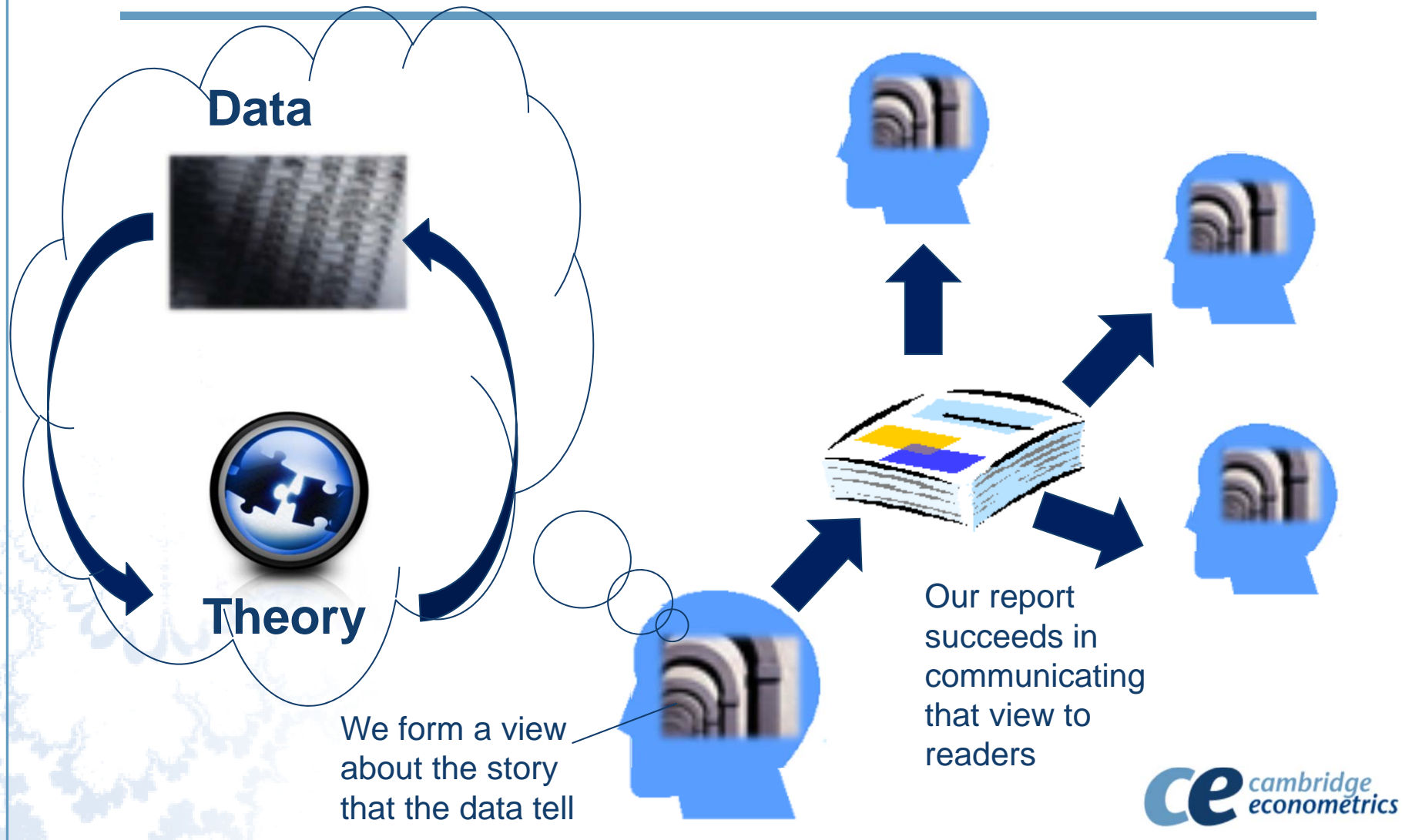
Richard Lewney
Cambridge Econometrics

25 June, 2010

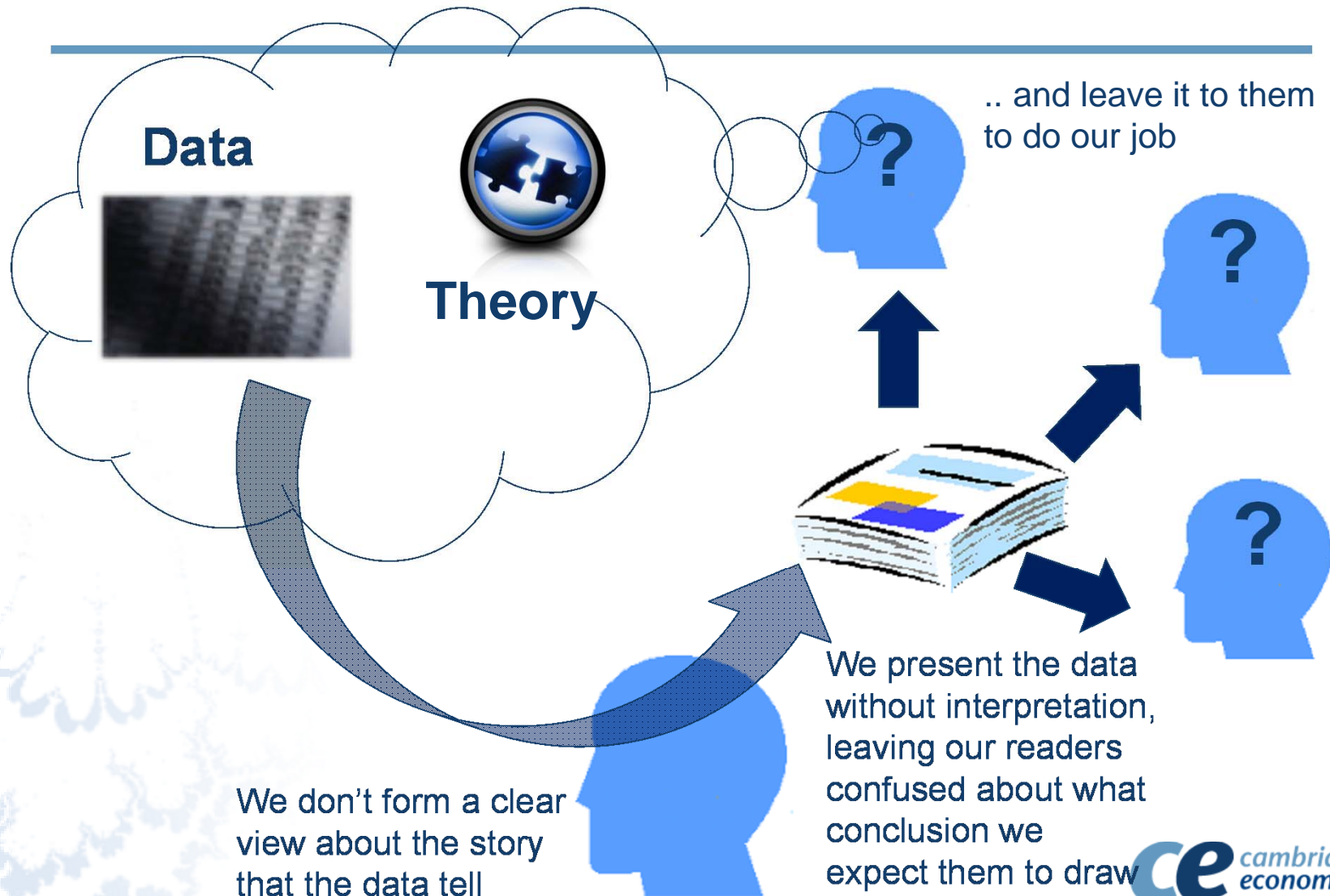
Overview

- **What are we trying to achieve (and what are we trying to avoid)**
 - two key issues
- **Illustrations of text that needs improvement**
 - ‘before’ and ‘after’
- **A practice example for you to try**

What We Are Trying to Achieve 1



What We Are Trying to Avoid 1



Issue 1: Interpretation

- **Facts (including numbers) do not speak for themselves**
 - our objective is to draw implications, not merely to present data (the ‘so what?’ challenge)
 - evidence is rarely unambiguous (counterfactual?)
 - the task of interpretation cannot be avoided (but we’re afraid to stick out our necks)
 - the task of interpretation ‘adds value’ to the data
- **So: decide on the story and tell it, and use numbers to provide selected examples of evidence**

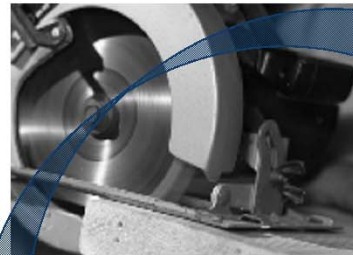
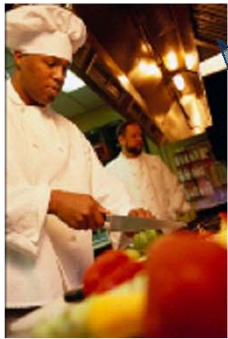
No Interpretation

'Siemens announced that it would site its new semiconductor plant on Tyneside. Chungwa is to open a new electronics plant in Lanarkshire. Growth in the industry is forecast to exceed 5% pa in the long term, but GEC is closing its plant in Edinburgh.'

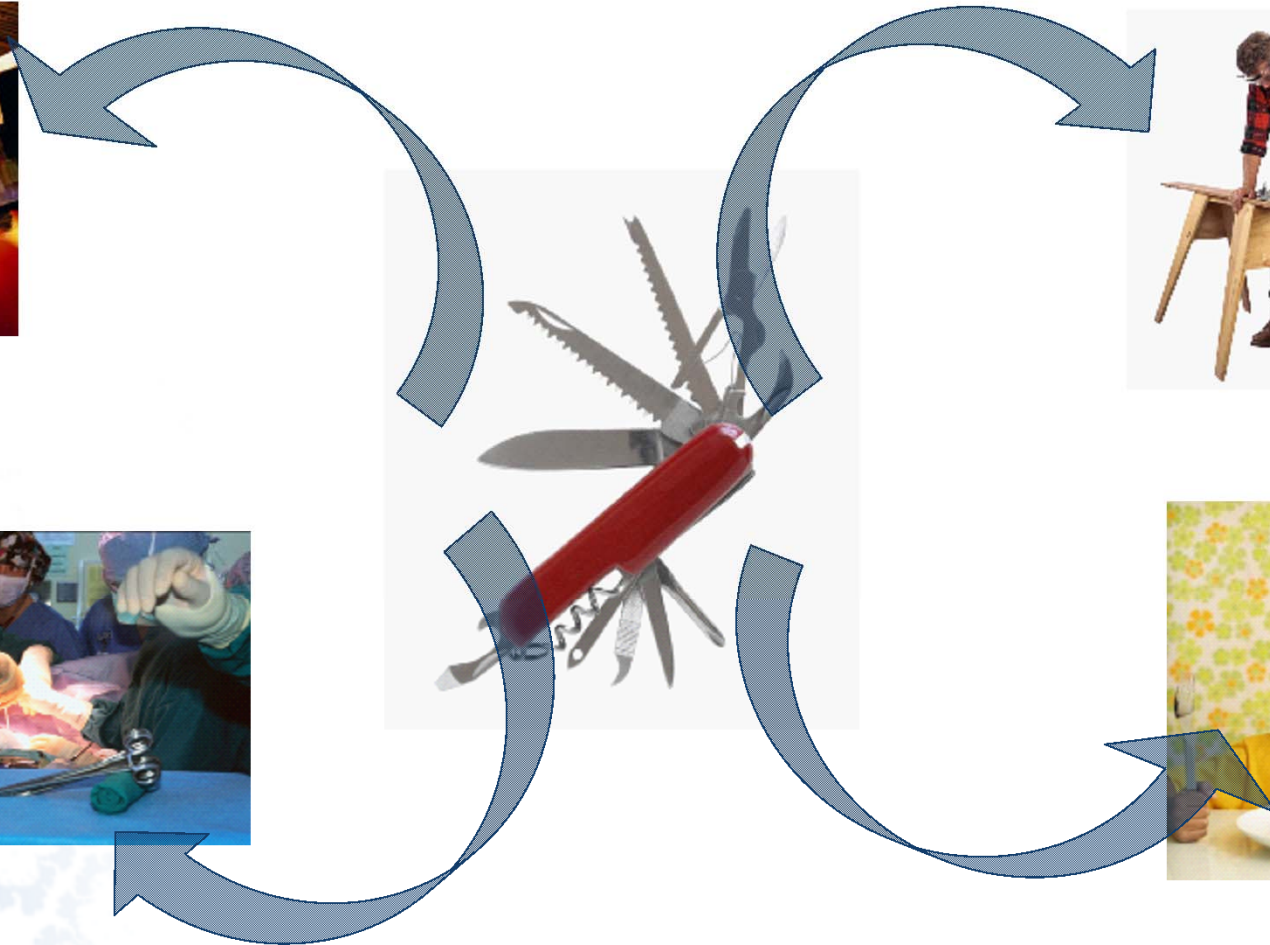
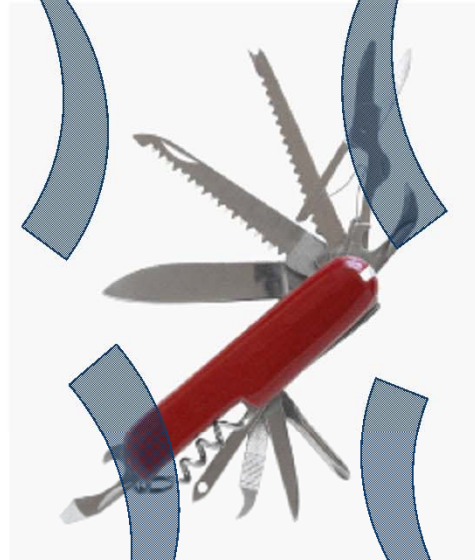
No Interpretation – Improved Text

'Some recent decisions have confirmed the UK's success in attracting inward investment in electronics. Siemens announced that it would site its new semiconductor plant on Tyneside. Chungwa is to open a new electronics plant in Lanarkshire. While such plants provide a welcome boost to employment, dependence on a large subsidiary can make a local economy vulnerable to rationalisation decisions taken elsewhere, as GEC's closure of its Edinburgh plant illustrates.'

What We Are Trying to Achieve 2



What We Are Trying to Avoid 2



Issue 2: Tailoring to the Client's Needs

- **We need to adapt our writing (and, more broadly, communications) style to the client we're writing for**
 - not 'one size fits all'
 - example: weather forecast
 - are we summarising the evidence, or giving a detailed justification to scientific peers?
- **The client's opinion of the work will be based on what they see, not what we did**
 - they may only read the report's summary (the part that we often write last, with least attention)
 - can they digest our report easily and quickly?
 - does it address their concerns?

No Tailoring

‘With regard to Keystage 1 SAT results, the proportion of pupils attaining Level 2 or above rose from 72% to 74% in 1997, although the number of pupils fell from 15 to 13 as the size of Year 2 was smaller than in the previous year. One child was absent on the day of the test. The proportion attaining Level 1 fell from 20% to 18%.’

So is the school doing well, or badly?

No Tailoring – Improved Text

There has been little change in the performance of the school as measured by SAT results. In Key Stage 1, the proportion of pupils attaining Level 2 (the standard expected of the 'average' child) or above rose slightly, and remains above the national average but similar to the Cambridgeshire average. This slight increase was reflected in a similar fall in the proportion attaining Level 1.

No Tailoring – Improved Text

There has been little change in the performance of the school as measured by SAT results. In Key Stage 1, the proportion of pupils attaining Level 2 (the standard expected of the 'average' child) or above rose slightly, and remains above the national average but similar to the Cambridgeshire average. This slight increase was reflected in a similar fall in the proportion attaining Level 1.

Note: no numbers cited at all!

No Tailoring – Improved Text for a Less Specialised Reader

Test results suggest that there has been little change in the attainment of children at age 7. More children than the national average are attaining the standard expected of the 'average' child. But this is to be expected in this generally prosperous county: the results are similar to the county average.

or

Children in this school perform as well as those in the county as a whole, and better than the national average.

Practice, 1

- **Two pieces of writing about UK inflation**
 - Office for National Statistics
 - Bank of England
- **Read the texts and make notes**
 - which do you prefer, and why?
 - highlight good and bad examples
 - who do you think the target reader is in each case?
 - how useful are the graphs?

Practice, 2

- **Prepare your own summary (50-100 words, English or Italian) for a politician in the Finance Ministry**
 - what is the decision that they need to make?
 - what conclusion should they draw?

How to Write About Numbers

Session 1: Introduction

A workshop in the series Policy Analysis 2010
for Istituto Regionale di Ricerca della Lombardia

Richard Lewney
Cambridge Econometrics

25 June, 2010