Beware of Large Numbers, and Small Ones!

During this Covid-19 crisis, an idea has been forced upon me by ruminating on how eagerly politicians latched onto this mysterious quantity \( R \), the "reproduction rate" of the illness. One of its attractions is that nobody outside a charmed circle can really check it. It is a numeric value derived from running a complex computer model, so it belongs to the priesthood and stays under their control.

Even more important, I surmise, is that it is also a small number, between 0 and 2, much smaller than number of Covid-19 deaths or people likely to lose their jobs. This musing has led me to propose a two-part hypothesis regarding numbers when used by politicians, and doubtless others in polemical or persuasive discourse. I suspect that they deliberately employ the following general strategy.

1. For things, events and processes necessarily associated with our side:
   1.1 if they're perceived as good (jobs created, lives saved, tests carried out etc.) quote the largest figures reasonably possible, if not larger;
   1.2 if they're perceived as bad (jobs lost, children in poverty, sickness rates, deaths etc.) endeavour always to use only small numbers.

2. For things, events and processes necessarily associated with our opponents:
   vice versa!

It certainly applied, for instance, during the Battle of Britain, where post-war calculations showed that both sides routinely exaggerated enemy losses and underestimated their own. Several recent examples by the present government also come to mind:

- 330 billion pounds for the financial support plan (may not all be used);
- millions of items of protective equipment supplied (by disaggregating items into subunits);
- 24000 trackers recruited (even if not trained);
- 0.5 to 0.9 for \( R \) (rather than 50000 excess deaths).

Various question arise. Firstly, are there counter-examples? I haven't found it easy to find any. Secondly, is this well-known to practitioners of the black arts of spin and PR? For all I know, my hypothesis may be so unoriginal that it can be traced back to Dr Goebbels or even Cicero and the classical rhetoricians.

[Richard Forsyth, May 2020.]