# Beware The Siren Songs Of Opinion Polling

**Chris Rose, www.campaignstrategy.org June 2013**

In days of yore, sailors were lured onto rocks, unable to resist the enchanted voices and music of Sirens. So fatal was their attraction, that Odysseus, on Circe's advice, had his sailors plug their ears with beeswax and tie him to the mast, to avoid being led astray.

Opinion Polling can be useful to campaigners but it poses a similar danger. Campaigns drawn into trying to navigate by what the polls say, or seduced into trying to win by changing 'public opinion', risk running aground and becoming stuck fast.

I'm not saying always ignore all polls, just be aware that they are made-up and clothed to seem factual, objective and benign but in reality are full of hidden traps, deceptions and, above all, mental illusions.

The best strategic safeguard is to have a critical path based on events and activities which evidence shows will lead to outcomes, and not to deviate from it (see *How to Win Campaigns*). As a rule campaigners should research, develop, test and then implement a plan, and not wait for public opinion. As Mary Frances Berry said of civil rights activist Rosa Parks: *"If Rosa Parks had taken a poll before she sat down in that bus in Montgomery, she'd still be" standing".*

So plan your campaign around changing outcomes, without needing to change opinion polls, and in the end you will probably in fact change 'opinion'. But let's set beeswax aside, and have a look at why polling can be deceptive. These examples are drawn from climate change but the principles apply more widely.

**Selective Reporting, Confirmation Bias and Social Proof**

If you were to ask people how 'polls' might give a misleading picture of 'reality', the most obvious answer is probably "selective reporting". Sometimes this is deliberate and planned to mislead but just as often it arises from unconscious 'cognitive biases' that affect not just media outlets and journalists but everyone.

The values survey findings for China, the US, Brazil, Argentina and India reported in my earlier blog showed majority 'belief' in climate change, and significant through to overwhelming support for action to 'decarbonize' economies and change consumer choices in line with that. Numerous other surveys (see below) in many countries, show the same thing.

So how can it be that many media reports of polling, and discussions of those reports start with the assumption that the opposite is true ? That 'the public' is not interested, or does not care, and that there is a 'problem' with public opinion ? It's not so much climate sceptics who say this, as those who advocate action on climate change but who have fallen for the siren song of opinion polls.

For example, in February 2013 a Globescan 'climate poll' survey was reported on the front page of UK newspaper *The Independent* as "Green fatigue sets in: the world cools on global warming". The Globescan press release itself was headed " Environmental Concerns at Record Lows: Global Poll". How can that be reconciled with the findings discussed above ?

**Selectivity**

One reason is indeed that 'conclusions' tend to do the political thing, and use statistics as a prop to support an existing point of view. When done unconsciously this is called confirmation bias but in the case of pollsters and even more so the news media, it may be deliberate. Take for example these two headlines reporting climate poll results from the US in 2012:

'Belief in climate change climbs, including among conservatives'

and

'Pew Climate Change Poll Reveals That Less Than Half Of Americans Make Anthropogenic Connection'

Both of these reports are about the same survey, and both authors are probably 'onside' for action on climate change, only one has chosen to highlight how far we've come, and the other, how far we've yet to go.

It is likely that these authors had different pre-existing mindsets. One that the 'opinion' problem was solved or on the way to being solved, and the other that it was getting worse. They then selected the 'facts' that supported that view, or framed their meaning to support it. Other studies have shown this happens if you provide "new information" on a contested topic: rather than modifying their existing views, people use it to reinforce their views.

Similarly, although the Globescan press release sought news coverage for a fall in 'concern', in one of the closing paragraphs it did note that 49% of the public surveyed still thought climate change "very serious", and presumably, although the data was not released, once the other results were taken into account, a majority considered it 'serious'. Indeed the results are probably similar to the international values surveys we have reported.

**Conventional Wisdom – Group Think and the Media Herd**

Another reason that many reports of polls are interpreted to show the opposite of what the results seem to show, can be the effect of group-think or 'conventional wisdom', driven by social proof operating at a professional level. In the case of climate change, for the past few years journalists and pundits have tended to use

opinion polls to support the general thesis that 'people' are growing more 'sceptical'. *The Independent*'s 'green fatigue' theory cited above is one example. (*The Independent* has published a number of reports talking up the notion of a 'green fatigue', eg in 2007, 2010, 2011 and 2013.)

The consistency heuristic is of course also at play within the polling business, politics and the media. If politicians feel the need to focus on another subject (eg the economy), they will want to play down public opinion that climate change is 'an important public concern'. If the media then want to give it less space, they will look for evidence that supports their own journalistic behaviour, eg "there is green fatigue". Pollsters will also want to 'catch the mood' of their own market.

This happened after the 'failure' of the Copenhagen Climate talks in late 2009 (also discussed below). Politicians didn't want to talk about the need for action, when they had just failed to deliver on it in a blaze of publicity. The consistency effect meant that people would have a natural tendency to rationalise failure of leaders to agree as indicative of this not being very important, especially now they had stopped talking about it. And polls started to be commissioned and reported showing a fall in public concern.

In January 2013 in his blog on public opinion 'Noise of the Crowd', Leo Barasi posed two questions: "What proportion of Americans say there is solid evidence that the earth is warming? Is it: a) one quarter; b) one third; c) a half; or d) two thirds" and "What has happened to that figure over the last four years? Has it: a) fallen every year; b) stayed about the same; c) risen every year."

He added:

*Judging by most conversations I have and the coverage of public views about climate change, most people would guess the answer is low and falling*

*But here's the answer, taken from the* Pew Research Center's *annual polls: two thirds and rising.*

*… the UK lags behind. This week's Observer included* a powerful editorial*, restating the evidence about current and future impacts of climate change. But it spoiled it with the line: "climate change denial is becoming entrenched in the UK, or … our media have become complacent about the issue, or both."*

*Everyone I speak to about climate change seems to think this. But, purely in terms of public opinion about climate change, I can't find any evidence to support it.*

*In fact,* as I showed last year*, concern about climate change in the UK is certainly not falling, and is probably increasing.*

*The polling is less extensive than it is in America, but I don't know of a single poll that shows that the UK public are currently becoming more sceptical about climate change. The general pattern is instead that there was a one-off increase in doubts around late '09 , which has been followed by a recovery over the years since then.*

And it's not just journalists. In May 2013 academic Matthew Lockwood wrote a Green Alliance blog about the rise of the right-wing UK political party UKIP, noting that it's "rise has been mirrored by a rise in the proportion of people saying that they do not think the world is warming". His blog was entitled 'what's the link between the rising tide of populist politics and climate denial ?'.

**Not Only Journalists**

Lockwood's source for the 'not warming' result as evidence of 'denial' was a poll by YouGov. This survey, conducted in 2008, 2010, 2012 and 2013 gave people four options to chose from, including "the world is NOT becoming warmer". The results for that choice were 7%, 18%, 15% and 28%. But did this indicate climate scepticism' or as the Green Alliance put it, 'climate denial' ? If you look at the rest of the results, the answer is no.

The same survey also asked whether "The world is becoming warmer as a result of human activity". The results for this were 55%, 39%, 43% and 39%. So on this basis, belief in human made climate change was the same in 2013 as 2010. But this did *not* create a trend consistent with a link with the changing fortunes of UKIP and was not reported in Lockwood's blog, and contradicts the assumption that there is a rise in 'climate denial'.

To give credit to YouGov themselves, in their blog they attribute the recent rise in the number of Brits thinking the world is not getting warmer, to a pair of cold winters. Anthony Wells of YouGov also noted that when the company ran two polls on the same issue, one asking if the world was 'getting warmer' as a result of human activities, the other asking if human activities are 'changing the climate;, they got very different results. "39% of people think human activity is making the world warmer. 53% of people think human activity is changing the world's climate".

(To contribute to Matthew Lockwood's enquiry, there most probably *is* a link between climate-denial and affiliation to UKIP because recently published CDSM surveys show that the core UKIP vote is Settler, and with some expansion to Golden Dreamer Prospectors, the self-same people who most over-index on 'not believing' in climate change in the international values surveys we have conducted. But they have probably been joined by other 'protest' voters in recent local UK elections who do not share the core values and may therefore fall away when it comes to a General Election).

The truth is that far from being an objective 'window on the world', most polls are statistics with an agenda, conscious or not. This is much more the case with 'opinion

polls', polls about what we 'think', and especially those designed for publication, than polls about what people do.

**A Siren Strategy**

Perhaps the biggest threat to campaigns posed by polling, arises where your adversary has instigated a strategy of drawing you into debate, in order to avoid a focus of attention on other things.

Take the notorious 2002 strategy advice from Frank Luntz (pollster) to G W Bush and the Republicans, to 'keep the debate open' on global warming [which he wanted renamed as 'climate change']. Point One of his strategy memo read:

"*The scientific debate remains open.* Voters believe that there is no consensus about global warming within the scientific community. Should the public come to believe that the scientific issues are settled, their views about global warming will change accordingly. Therefore, *you need to continue to make the lack of scientific certainty a primary issue in the debate,* and defer to scientists and other experts in the field."

The plan then, was not to 'win the argument' but simply to *sustain the debate* amongst scientists. The Global Climate Coalition and much-reported networks of funders covertly channelled oil, coal and gas money to 'sceptic' scientists, who provided 'experts' for one side of the debate, while climate campaigners and the vast majority of climate scientists unwittingly supplied the other.

Opinion polls then provided neatly encapsulated, media-friendly 'proof' that a debate existed. Literal-minded advocates of action on climate change, intent on 'winning over the public', were drawn to this like moths to a flame. In so doing, they fuelled the success of the Frank Luntz strategy, and set in stone a media framing of 'climate change' as 'a debate', which still poses a dilemma for campaigners today, more than a decade later. (For example with the forthcoming 5th Assessment Report of the IPCC due in 2013 – 4.)

**What Generates 'Opinion' ?**

To avoid the sorts of pitfalls created by Luntz, campaigners need to better understand what 'public opinion' is. Winston Churchill said: "There is no such thing as public opinion. There is only published opinion". However that is interpreted, it is certainly true that in looking at an opinion poll, or a report of a poll, you are not looking at raw public opinion but at a processed, manufactured product. The polling process, the publication process, the reporting process and even the process of subsequent debate and word of mouth, all manufacture the meaning that we think an opinion poll shows us.

Opinion polls involve conducting surveys and survey responses measured as "public opinion" have a number of causes, including

- knowledge and understanding
- salience (how immediately important something seems)
- behaviour (of the respondent)
- framing (the way the question is put)
- values (whose effect was discussed in a previous blog which reported climate surveys)

Of these, the first is generally by far the least important, as when it comes to topics like 'climate change' most of us have very little real knowledge and understanding of the subject in question. So we cannot mentally verify our opinion in the same way that we can say how many days we spent on holiday last year, what brand of jam we buy, or which breed of dog we own. And it is much harder to check our answers against a measurable reality, even how much litter there seems to be.

Yet it is central to the authority of most polls about what people "think", ie their 'opinions', that they *are* measuring views based on an analysis of the 'relevant facts'. Writer Oscar Wilde described "public opinion" as "an attempt to organize the ignorance of the community and to elevate it to the dignity of physical force", and the more attention we pay them, the more authority polls gain, and so, the more they may influence real outcomes.

Naturally, it is not in the interests of poll purveyors to question their 'veracity'. No newspaper, and no polling company, announces poll results with a headline like "ignorance and prejudice drive concern on [topic A] to new highs", or "absence of media coverage and political inactivity cause massive drop in public concern about [topic B]". So although this is a more realistic interpretation of many polls, there is some institutionalised interest in mis-representing the results.

The 'issue' of climate change is a classic example of a 'wicked problem', one with no definitive solution or 'right answer', and no knowable 'stopping condition', unlike for example, a chess game. It is complex, and even if you take just one part of it, it's very difficult to form a view based on analysis of the evidence, and the conflicting views about the evidence. Only those who spend a huge amount of time and effort working on one corner of it, stand much chance of arriving at opinions based on analysis. So for the great majority, opinions are based on something else.

**System 1 and System 2 Thinking**

The something-else is the intuitive, emotional, quick and easy way of making decisions, including decisions about what to 'think of something', ie 'opinions'. Daniel Kahneman terms the intuitive way 'System 1', as opposed to 'System 2', the analytical, harder and slower way.

Kahneman won a Nobel Prize in economics for showing that human beings mostly make decisions using 'cognitive biases' or short-cut intuitive 'heuristics', which is why we are not 'economically rational', despite most economic policy being based on the

assumption that we are rational economic actors. The same applies to polling responses about difficult-to-analyse questions.

This is the underlying reason why, if you take the limited case of whether or not 'scientists agree that human-made climate change is happening', you find much lower assessments of 'scientific agreement' amongst 'the public' who are not involved in the detailed debates, than the scientists who are involved. You may have read reports of the study which found 97% of scientists agree climate change is human-made, whereas many polls show the public think only 30 – 60% of scientists agree on this.

This has huge political significance because politicians are deterred from taking action if they think there is substantial doubt and/or a lack of public support. As one academic wrote of climate opinion polls in newspapers, they: "have been employed to (a) close or keep open public debate on the reality of anthropogenic climate change, and (b) to propagate favoured responses to climate change at the policy and the individual level". Most notably to portray the public as uncaring or hypocritical.

**Polls and Media Magnify Effects of System 1**

For campaigners, it's also important to realise that the way polling is done, *magnifies* the importance of System 1 effects, over and above what happens in real-life if there is social debate about an 'issue'. Like most voting systems, polling not only offers people a closed set of choices but it counts each person's 'opinion' as equal to everyone else's. This has a natural if superficial appeal of fairness and 'democracy' but it's not what happens in most real life situations.

Forget climate change for a moment and think about a polling question on say, options for the best way to build a bridge. Because poll results usually come from providing people with a set of options to chose from, the first difference between a poll and a 'natural public conversation' that might take place in for instance, a conversation on bridge-building in a pub or around a dinner table, is that everyone *has to* voice 'an opinion' *and* they all count equally.

Polls are run until there is a set of 'completes', eg 1500 people selected so that they are representative of age, sex and maybe other measures. The pollsters go on running the questions, *until* they reach the target number of completes. Anyone who skips the bridge question, isn't included in the poll at all.

In a real-life situation you get a very different dynamic. Some people may not voice an opinion because they feel they have no idea of the answer. Or, if it seems to be a topical and important question (eg, if there has recently been a much discussed bridge failure we can all remember [the availability heuristic – we overstate the importance of what's easy to recall]) everyone may have a view but if it emerges that

one of those present is a civil engineer, or even a builder, the dynamic will change. Many people will defer to his or her greater knowledge (the authority heuristic).

It's a lot more likely that you'll find a builder or engineer in your pub conversation than a climate scientist. So almost all 'opinions about climate change' are purely based on System 1, the 'emotional', 'reflexive' or 'intuitive' system, which Kahneman also describes as "a mechanism for jumping to conclusions". Many conversations will start out focused on a 'fact' and seem to be 'System 2' but as soon as the going gets difficult and the available facts run out, or it gets hard to separate the relevant from the irrelevant, we get what Kahneman terms 'substitution': here the difficult, analytical task posed in a System 2 way, is substituted for by an easier question that can be answered with System 1. Very often, this happens faster than a blink, and a question drawn up in System 2 terms, is answered with System 1, without any of us noticing.

One example was discussed in Campaign Strategy Newsletter 48. In this case sponsors of an EU poll claimed it showed a high level of understanding (60%) for policies to protect 'biodiversity'. Yet a qualitative UK study which allowed for *unprompted* responses, showed that only 9% really understood what biodiversity meant. Both studies found about 30% claimed they 'really knew' what it meant but the UK one showed that the most popular explanation was 'waste that breaks down naturally', in effect 'biodegradable', as in many washing up liquids. This is not what biodiversity means but it *sounds* similar: "bio" + "d-something", so that informed a guess, which polling can convert into a 'fact'.

**Framing, Salience and Social Proof**

This is where 'framing' comes in, because a frame often provides the evidence that System 1 uses to decide an answer. So if, for instance, climate change is framed as 'warming' as in 'global warming', and the recent weather seems uncommonly hot, 'belief' in climate change as 'global warming' is likely to rise as System 1 kicks in. Conversely, in very cold winters it may fall: 'global warming' feels implausible.

Ever since James Hansen's 1988 testimony to Congress that 'climate change has arrived', given in sweltering conditions, studies have shown that the 'evidence of our senses' affects how we assess the meaning of meticulously gathered but inaccessible scientific data on 'global warming'. As YouGov pointed out, it is likely that memorably cold weather probably pushed up the number of Brits who think the planet is not getting 'warmer' in 2013.

This means that if climate change is framed differently, for example as making weather 'unusual' or 'chaotic' or 'unpredictable' or more 'extreme', System 1 reaches for different evidential short cuts with which to answer the question, "is it happening or not ?".

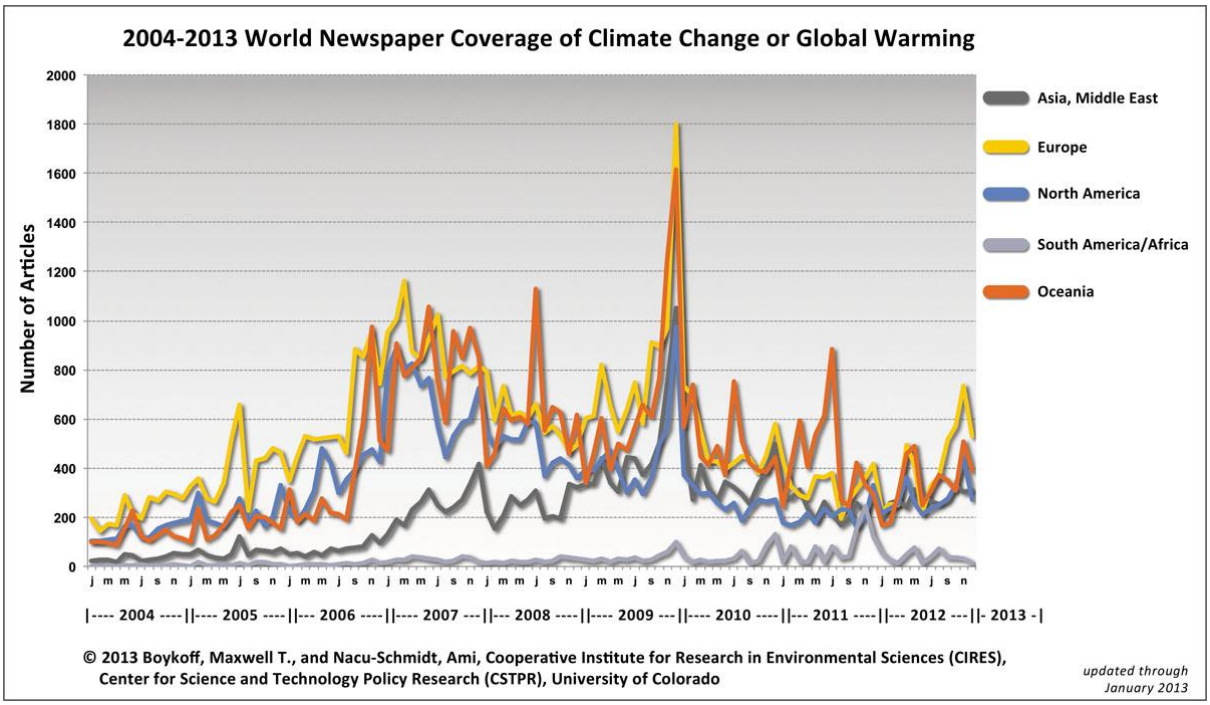
In fact a lot of 'climate change opinion' polling is not framed as about the climate as part of the environment or about science but as a social issue. Asking "how concerned are you about climate change" makes it a question of personal worry, while asking "what is the most important issue facing the country ?" or "how important is climate change as an issue ?", also invites respondents to think about people and conversations, not about clouds, rain, wind or temperature.

In these circumstances System 1 has quite an easy time of it. The social proof heuristic is perhaps best known mental short-cut of all. It proposes that if others are doing it, then 'fall into line' and do it too. Social proof plays a huge role in deciding, for instance, whether or not to respond to a fire alarm as real, and hence has been intensively studied by those trying to design emergency evacuation procedures.

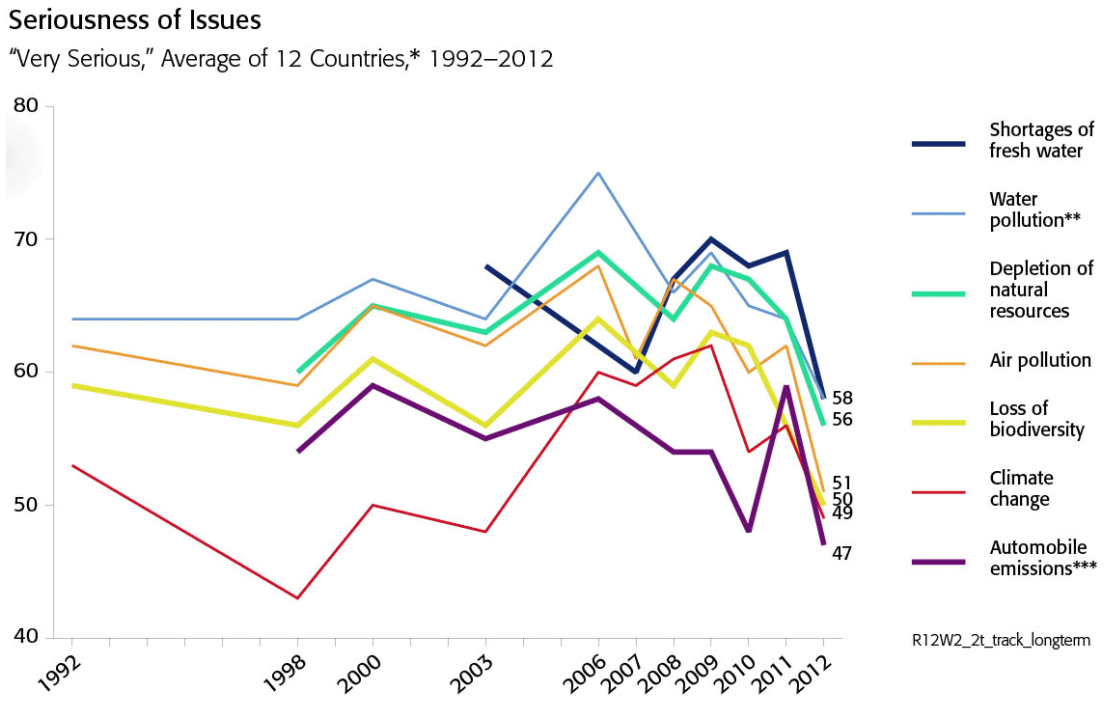
What's the easiest way of deciding how-worried-to-be about 'climate change' ? Just ask yourself, "how worried are other people ?" and "how worried do 'they' say we should be ?" Such questions about how important "an issue" is, or "which is the most important issue facing the country", are answered by recalling what has been in the media. The word "country" frames it as about national leaders so we can just ask what our national leaders are saying, as they are nominally in charge of 'the country'.

Thus when media coverage drops and politicians stop talking about climate change, the number of those rating it as "very serious", is likely to fall. On the other hand, if it's everywhere in the media, a subject seems salient, immediate and so 'important'. If the media is silent on the subject and it has little other 'presence', then it's no longer immediate and front-of-mind: it is less 'important'.

Compare this University of Colorado analysis of newspaper coverage of 'climate'



to a Globescan graph of the ‘very seriousness’ of climate change

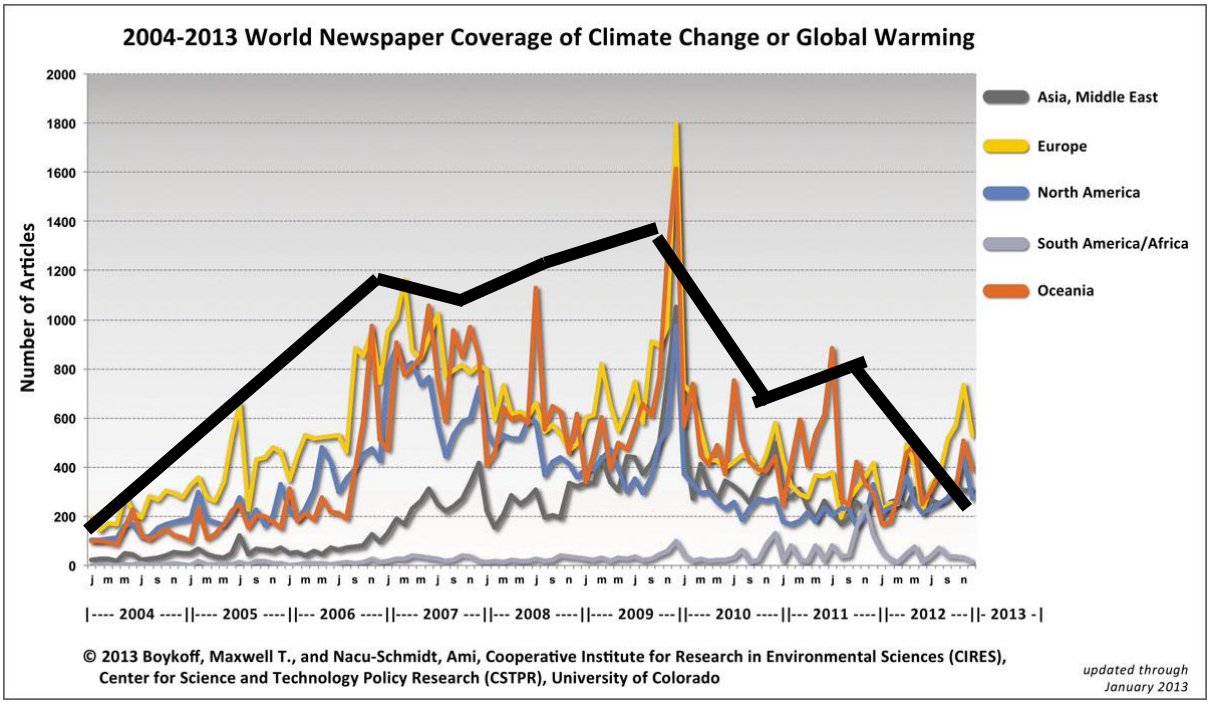



*Average of Brazil, Canada, China, France, Germany, India, Indonesia, Mexico, Nigeria, Turkey, UK, and USA. Not all questions were asked in all countries in all years.

**Not asked in Brazil, Canada, and France

***Not asked in Brazil and Canada

Here I have very unscientifically superimposed the 2003-12 section of the Globescan climate result on the newspaper result:

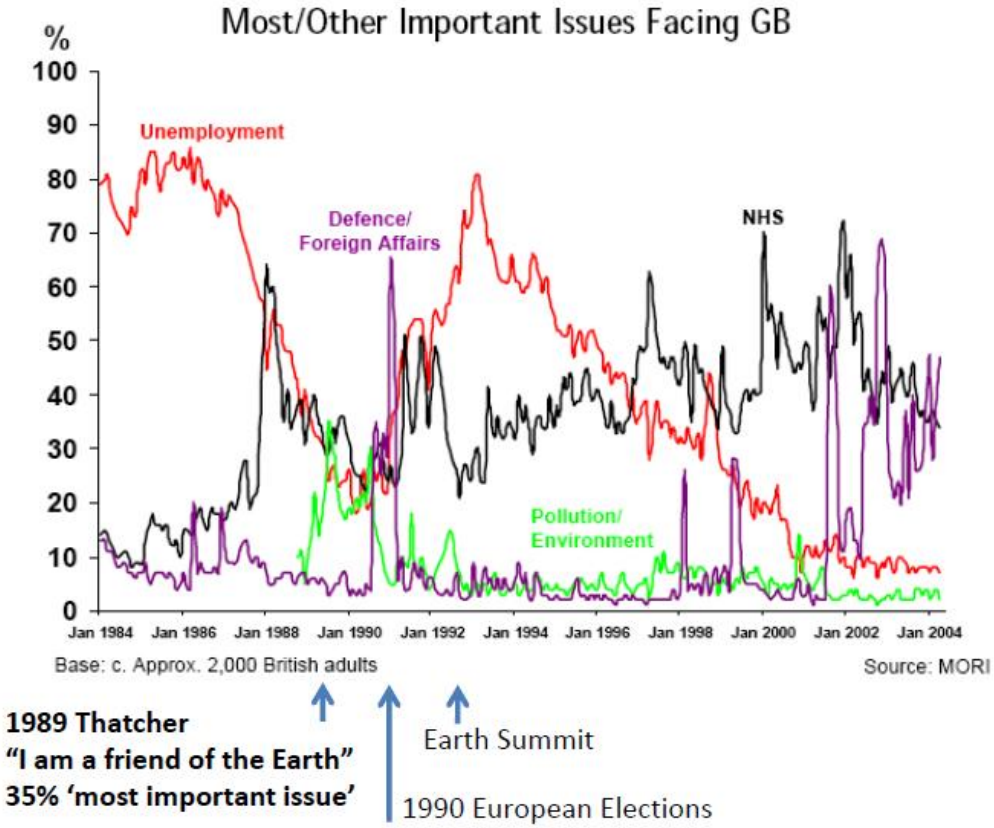



Rather than 'green fatigue' driving down the 'concern' about climate change, the more likely explanation is that dwindling media coverage and political attention caused the drop.

If pollsters and journalists do not know this, then they are naive. Some at least do know it but they are cynical enough to interpret polls differently, because it suits the interests of their organisations or their careers.

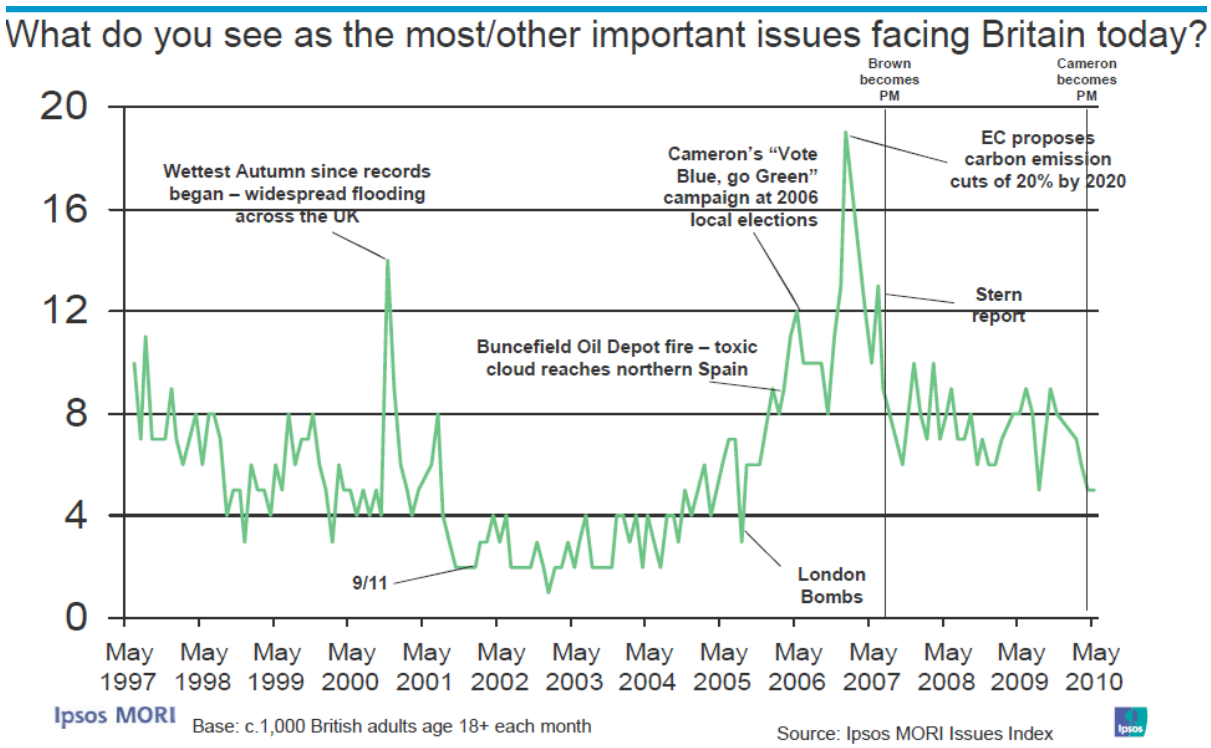
This media-driven-opinion effect has been graphically demonstrated many times. For example this IPSOS MORI chart of UK public opinion by Andrew Norton and James Leaman is annotated to show the jumps in the importance of 'pollution/environment' as an 'issue' (green line) when then Prime Minister Mrs Thatcher made her famous climate change speech in autumn 1988, the European Elections in 1990 when the Greens won 30% of the vote, and the 1992 Earth Summit. At all these points, political attention drove 'concern' as registered in polling, about 'environment' and 'climate'.

The big jump in 'defence/foreign affairs' that soon followed was the effect of 9/11 and the subsequent 'War on Terror'.




The MORI graph below shows that when UK politician David Cameron ran an electoral campaign focused on environment in 2006, 'concern' at 'environment/pollution' in the UK rose, when measured as 'the most important issue facing the country'. It spiked again when the EU announced the need for a 20% carbon cut by 2020 in 2007.

None of these cases was caused by the public analysing the state of the climate, or indeed any changes in the climate but instead, reflected political and media attention. Similar effects have been reported amongst Republican voters following elections to chose their presidential candidate, amongst a stable of candidates all adopting 'climate sceptic' positions.




[Green line is 'environment']

Climate change has also been framed as about reaching political agreement, or as Tony Blair put it 'breaking the climate deadlock'. Various surveys, for instance for the BBC, found that when politicians said they would gather for a make-or-break conference at Copenhagen on climate change in 2009, 'concern' for climate change rose.

Afterwards, when politicians failed to meet expectations (and the media lost interest), the BBC and others commissioned another poll that allegedly showed that climate scepticism was "on the rise". However, as is often the case, closer examination found that the spin put on the survey by both pollsters and journalists, was seriously misleading. Subsequent polls found climate scepticism had continued to decline.

**Talking It Up, Talking It Down**

Media and pollsters often spin findings to 'talk up the story'. Both act as ratchet mechanisms or a turbo injecting air into an engine, exaggerating a 'growing trend' in a way that makes the story more convincing. The news media, pollsters and politicians all have a common interest in rationalising 'single topic bias', having only 'one big thing' at the top of their agenda at a time. As they depend upon each other for business, this is mutually advantageous as it enables rival politicians and media outfits to compete for public attention, in a similar way to independently acting fashion designers all "deciding" that blue, green or black is "the" colour of the year: expedient group-think.

Within democracies politicians also seek to manufacture difference in order to create clear differences in offers at an election. The evidence on an issue chosen as a 'dog whistle' (Kahneman's System 1) 'wedge issue', is then talked up or down in order to support the position adopted. This is happening on climate change in the UK at the moment, with both the Liberal Democrats but more so the Conservatives, choosing to differentiate themselves over energy and climate, even though they are both in the same coalition government.

The motivation of the Conservatives, the dominant party in the coalition, is to play to their core base (which has historically coincided with the Settler-Prospector boundary of Brave New Worlds and Golden Dreamers), and which now overlaps with the values territory of UKIP, which threatens the Conservative vote from the right. The result is that the UK government, led by the influence of the climate sceptic Chancellor George Osborne, is sounding ever more 'sceptical' on climate change for purely electoral ends.

Of course these are not the only causes of shifts in perceptions and opinions but they do have a massive effect, especially on topics where direct personal experience can play very little role.

**Behaviour**

It is usually implied in news media and blog commentary that opinions cause behaviours, and so opinions are important because of that. In reality, opinions often reflect behaviours, which is why good researchers put more emphasis on understanding what people do, rather than what they say.

The media are especially unlikely to acknowledge that behaviours are driving a lot of 'opinion' because then, lacking data on behaviours they don't have a lot to say about the role of behaviour in an opinion poll.

It is widely accepted in the sales, marketing and advertising industries, that behaviour drives opinion. Our desire to remain consistent in the eyes of others (even when the 'other' is an anonymous phone interviewer or a computer screen in an internet survey) and ourselves, strongly shapes our opinions.

Robert Cialdini recorded numerous examples, and this process of rationalising our behaviours is the almost certainly the factor that underlies shifts in opinion that follow the spread of new behaviours, for example the rise in people seeing environmental benefits from recycling in the UK in the mid 2000s. In the town where I live, it is remarkable how many people "did not believe" that wind energy really worked, before a large wind farm was built offshore and the town experienced economic benefits including new jobs, and scepticism now seems to have been forgotten.

Upton-Sinclair famously remarked "It is difficult to get a man to understand something, when his salary depends upon his not understanding it". This is probably why a 2013 poll found a strong majority belief in human made climate

change amongst Canadians in every province except one. This was Alberta, home of the Tar Sands; hideously polluting but also job-creating. The difference is likely to be due to rationalisation, not special knowledge of climate change science.

Consistency is also what drives a lot of 'climate scepticism' amongst Settlers, who provide the bedrock of the "deniers" in every country we have surveyed. Because they are the last to adopt new behaviours, and to drop old behaviours, they retain views consistent with those old behaviours.

The consistency effect means that we adjust our memories of old attitudes and beliefs, to fit with new behaviours not opinions. The big picture importance of this is that campaigners should try to change behaviours: see Change Outcomes; Minds Can Follow. If you want to delve into the way consistency works at the level of brain science, try The Winner Effect by Ian Robertson, and the story of Benjamin Franklin.

**The Hidden Effect of Choice Architecture**

It may sound obvious but to interpret and especially to compare polls, you need to look at the questions asked, not just what is said about them. This means looking at the structure of choices, not just the "question".

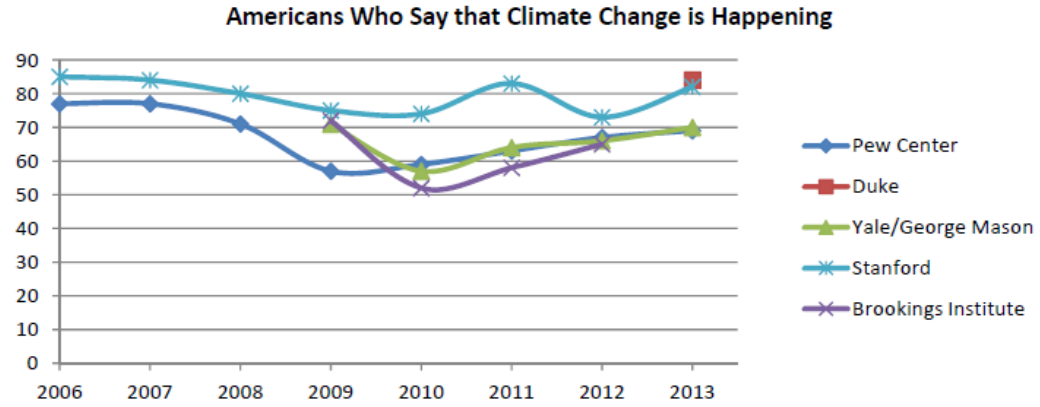
One way polls are used in politics to sideline an opponent, or used in any field to 'frame' an issue (as about this-and-that but not the-other), is the "Horse Race Poll". This classically asks "of candidates A B and C, who do you most back to win the race ?" The bias comes in when it does not mention candidates D, E and F. This invokes yet another Kahneman driver, WYSIATI or "What You See Is All There Is", a well-known source of bias in courtroom evidence where witnesses reach firm conclusions manufactured in their heads as the brain unconsciously joins the dots to 'make sense' of a fragmentary picture, even by creating false memories.

In this case it makes us think that the real choice is the one polled about, and in parliamentary politics this may be used to marginalise smaller parties, who are not mentioned in the polls. As they are then excluded from subsequent media coverage, this makes it less likely people will vote for them, and that will have the greatest effect on people concerned to 'back a winner' (which in values terms, generally means Prospectors).

Of all the countries in the world, the one which embraces polling most enthusiastically, is probably the United States. Campaigners can find a cornucopia of polling to get lost in, for example those gathered together by US Climate Network.

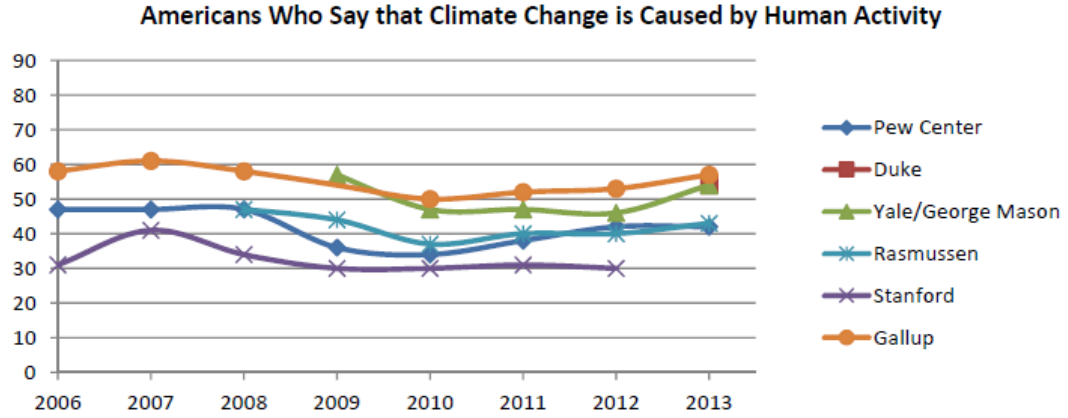
Faced with a torrent of polling, it's tempting to look for polls of polls, and the Environmental and Energy Study Institute helpfully collated some 20 polls earlier this year. For example a Duke Poll showed that only 15% of Americans thought climate change was not much of a threat, 1% thought it no threat at all, and the rest saw it as serious or very serious.

Here's the EESI's summary diagram of several different polls over time.




So between 2006 and 2013 five polls found the number of 'Americans who say climate change is happening' remained pretty stable (with the post-Copenhagen dip) but their estimates range from 50% to nearly 90%.

Here's the EESI's summary of causality.




We've discussed some of the factors that might drive this one way or the other but if we assume they are all polling a similarly representative sample, what can explain the big and consistent differences between, for instance Gallup, which consistently shows 50 – 60%, and Stanford /Washington Post, which fluctuates between 30 and 40% ? It turns out that while both these polls have similar *questions*, the *choice structures* are different in a way which explains the difference.

The Gallup Poll asks 'From what you have heard or read, do you believe increases in the Earth's temperature are due more to [ROTATED – the effects of human activities (or) natural changes in the environment that are not due to human activities ?'

Gallup then gives three options: Human Activities, Natural Causes and No opinion. So it measures 'Americans who say that climate change is caused by human activity', using a three horse race.

The Stanford / Washington Post Poll asks '(Half sample) Do you think a rise in the world's temperature is being caused mostly by things people do, mostly by natural causes, or about equally by things people do and by natural causes? (Half sample) Do you think that the increase in the world's temperature over the past 100 years was caused mostly by things people did, mostly by natural causes, or about equally by things people did and by natural causes? ' [If a respondent had earlier said climate change was not happening in they asked "Assuming its happening/If the world's temperature did increase…" and "would be" or "could be"].

So Stanford recorded four options: Things People Do, Natural Causes, Both Equally and Don't know/no opinion. That means measures 'Americans who say that climate change is caused by human activity', using a *four* horse race.

Let's look at how the results compare for 2012, the last year the Stanford poll was run.

Gallup (2012):

| | |
|---|---|
| The effects of pollution from human activities | 53 |
| Natural changes in the environment that are not due to human activities | 41 |
| No opinion | 6 |

Stanford (2012):

| | |
|---|---|
| Things people do | 30 |
| Natural Causes | 22 |
| Both equally | 47 |
| Don't know or refused | 1 |

If you split the Stanford 47% who chose that in 2012 and share it out equally so that the two polls are comparable in choice architecture terms, it shows more people (43.5%) blaming human causes than (35.5%) blaming natural causes, which is pretty similar to the 53% for 'human' and 41% for 'natural' in the Gallup Poll.

You don't need to be Daniel Kahneman to see why "a bit of both" might be the most popular choice: it sounds the safest bet, and confronted with a reference point of this kind, most people will tend to go for the 'middle option' (similar to the anchoring heuristic).

[If campaigners are commissioning their own polling, such a question is generally to be avoided because 'both' or 'both equally' conflates at least two sets of respondents, those who actually know a lot about climate change and realise that natural and human factors are overlaid, and those who know nothing but are guessing that if there's a debate maybe the answer lies somewhere in the middle. Presented with a fudge option, people tend to go for it like rats up a drainpipe].

Simply because of contextual factors like behaviour change, salience effects and the non-comparable choice architecture of polls themselves, the regular appearance of different polls on the same subject is in itself enough to create differences which may appear 'newsworthy'.

For example, imagine that in 2012 you were first shown the Gallup result "53% say climate change due to the effects of pollution from human activities", and then, the Stanford result: "30% say climate change due to things people do", now you could have all sorts of fun with headlines. "Poll shows huge fall in belief in climate change" might be typical but also entirely wrong, and that's without the 'first simplify, and then exaggerate' activities of the news media.

Yet all these polls show a fairly stable or generally rising conviction that climate change is real. They also show that most of the American 'climate denial' is concentrated in a minority which tends to be right-wing, Republican or 'other' (non Democrat) voting, older and white but most of all (our surveys), to be Settler and Golden Dreamer in values. Given this, one wonders what the point is of continuing to spend a lot of time and effort worrying about 'the state of climate polls', especially if this is at the expense of changing outcomes, or if it leads to debate-about-polls which will tend to sustain climate denial, just as Luntz planned back in 2002

**Ten Possible Rules For Interpreting 'Opinion Polls'**

I am wary of doing this as entire books, indeed probably libraries of books have been written on the subject by real experts but for what its' worth, here are some things to think about before deciding anything on the basis of 'opinion polling'.

1. Read the actual questions, don't just accept someone else's interpretation: they almost always will have re-coded or reframed it

2. Only compare time series of the same set of questions asked in the same way – be extremely wary of cross-comparison of polls (if you plan to spend money based on polling, commission your own and verify understanding with qualitative research)

3. Remember someone commissioned the poll – ask who and why ? What were they trying to do ? Remember Luntz – his whole climate strategy was simply to create and sustain a debate.

4. In the particular case of statements by politicians remember that they may be trying to stimulate public opinion in order to shore up support for an action they want to take, or drive it the other way to make action they do not want to take look impossible, or they may be trying to stay 'in step with' public opinion to seem empathetic, in order to be popular

5. Ask who has selected the results to tell you about, why and which results (and what results are they *not* telling you about) – ask yourself how did you get to hear about the results ?

6. If a polling company has released the results, ask who paid them, or what they are trying to do by publicising the results (eg to get PR to generate more business ? if so they may have tried to select the most sensational results, or those which they think will attract commissioners with a particular agenda)

7. Choice architecture. Especially if you compare polls, check what choices were put in the question ? What was not put as an option ? Beware of Horse Race Poll effects.

8. Look at the size of the sample – polling companies are unlikely to use anything below 1000, with quotas for age and sex to make it 'representative' but PR firms may use just a few dozen

9. Remember the herd effect (social proof, 'peer pressure', conventional wisdom): pollsters and interpreters are generally likely to talk up or find conclusions which support the prevailing wisdom – an 'outlier' poll seems intuitively 'wrong', so pollsters and analysts naturally clump together, and media commentary tends to drive a trend once it is 'discovered' (attention bias).

10. Most of all, ask yourself how 'people' will have answered the question. Is it one they can answer analytically from knowledge they are certain of (eg 'how many cats do you own, 1, 2, 3, 4, 5 or more ?') or is it a question that can only be answered intuitively, through proxy indicators such as heuristics, attitudes and beliefs, ie values (eg 'is the economy getting better or worse ?', 'what's the most important issue facing the country today ?', or 'how much of a threat is climate change to future generations' ?) If the latter, then you are probably looking at results driven by effects like values, consistency, and salience, not knowledge of "the issue".

**Conclusion**

For campaigns, the importance of behaviours is that they are intrinsic to real outcomes. To get less pollution, for instance, people must change what they do, not what they say. Which is why the approach I advocate is always to try to work back from the outcome you want, in order to plan a communications campaign. If not, countless pitfalls may ensnare you, of which the circular relationship between media, polling and pollsters is but one.

To chase the chimera of changing opinion rather than changing outcomes, risks leading you round in circles, like A A Milne's Pooh Bear who ends up walking round and round a tree in pursuit of a Woozle, before he realises he is following his own foot-steps.

"Tracks," said Piglet. "Paw-marks." He gave a little squeak of excitement. "Oh, Pooh! Do you think it's a -- a -- a Woozle?"

"It may be," said Pooh. "Sometimes it is, and sometimes it isn't. You never can tell with paw-marks."

'I see now,' said Winnie-the-Pooh ..'I have been Foolish and Deluded, and I am a Bear of no Brain at All."

So if you are going to follow opinion polls, be sure to engage the brain first.