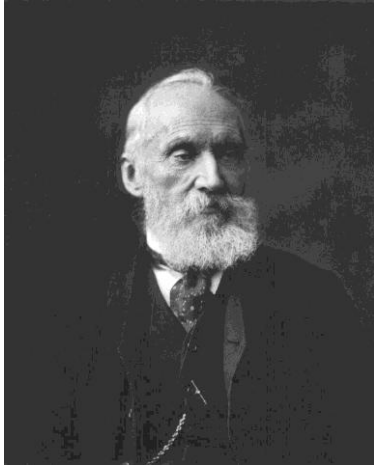


*November blog*

## **Geoffrey Cannon**



There is still plenty of juice left in the Porto congress. Last month I included three 'Porto musings' items. This month there are two more, on the need for jokes, and the need to be active. Between them, the items in the bumper number this month touch on Bullshit Bingo, the stones of Venice, Cokeistan, roses, numbers, ethics, values, and love. That should keep us going.

Also, after introducing recent columns with pictures of glamorous women, I turn to academic men, towards the end of this column. Both these two full-bearded coves were physicists and mathematicians, and students and then professors in Scotland. They are William Thomson, the first British scientist to be ennobled, as Lord Kelvin (1824-1907), and James Clerk Maxwell (1831-1879), whose portrait hung in Albert Einstein's office (1). Both were devout Christians, and so in the sense of the term used now, creationists. They also shaped the sense we have of what is science. Why them? Well, some readers feel that this column has frivolous and fanciful tendencies, so maybe portraits of eminent Victorians from the land of John Calvin will provide balance and assurance. You want serious? I can do serious. This month I end with Ernest Hemingway on the ineffable.

### *Footnote*

- 1 When I link the name of a distinguished person to the internet, I suggest you start by accessing Wikipedia. The entries on scientists are usually excellent.

## *Porto musings (4). The profession of nutrition*

### **Bullshit bingo, and good humour**

One special pleasure for me at Porto, was inviting Michael Latham and Walter Willett out to supper at an *al fresco* seafood restaurant chosen by Walter on the *Muro dos Bacalhoeiros* (the ‘Embankment of the Cod Fishermen’). Boats loaded with salted cod from the Newfoundland banks moored under where we were sitting, at first some decades before Christobal Colón ‘discovered America’ (1).

Michael and Walter are both professors at US universities, and both have deep experience of working in Tanzania – but had never before sat down to a meal together. Over *polvo* or *sardinhas*, (octopus or sardines) washed down with a bottle of chilled *vinho verde* and *água com gas* (white wine and fizzy water), they reminisced about the same Tanzanian dirt roads they had travelled, and the same lakeside rest-houses they had stayed in – but at different times.

They both know that the fate of any nation is determined by what it eats, and therefore are not defensive. Not a bit – if anything, the reverse. Both also delight in stories and jokes. In the midst of reflecting on the Porto presentations, Walter asked if we were familiar with Bullshit Bingo. No, we were not. So he explained. It’s a way to keep awake and amused during any technical presentation. As in bingo, players are issued with cards, printed not with 25 different numbers, but five rows each of five phrases (or acronyms) liable to be used in the presentation. Mixed metaphors are also included. As in bingo, the phrases are different on each card. The presentation starts, players are eyes down and then up to check the screen, and the first player to complete a line calls out BULLSHIT! This is definitely one for a future nutrition congress.

After supper with Walter and Michael, I started to read food and nutrition policy documents through new eyes. Imagine a PowerPoint presentation on *scaling up nutrition*, and its bullet-pointed phrases likely also to appear on the Bullshit Bingo cards. With apologies to recent documents ricocheting around the e-circuit...

Use of *evidence-based methodology* to show that *interlinking existing mechanisms* to shape the *road-map* towards *private-public-people partnerships* involving *multi-stakeholder fora* and *concrete transparent dialogue* represents *value-added* and *win-win situations* and, in the present *credit-crunch* are *low-hanging fruit* for *sector-based platforms* to *scale up nutrition*, towards *deliverables* for *sustainable food and nutrition security for all*. There is need for *high-level expert panels* that ensure *science-industry interfacing* and that *harness upstream drivers* and *grass roots educational efforts*. Also *interagency interchange* between *SUN, CEB, ECOSOC, WFP, LAEA, EIEIO,*

REACH, GAIN, SC, necessitates *lean and agile structures* as part of the *high-level world nutrition architecture* (2) ...

# BZILLSSANT!

## ***Secure people have fun***

Academics and other professionals within our field are often full of fun and frolic, when away from their desks. But they characteristically are awful careful and take themselves awful seriously in their working hours and in what they write (3). Therefore here is proposed Cannon's Law of Reciprocal Pomposity, whereby the less important any science is generally seen to be, the more self-important are its practitioners. A variation is Wag's Rule, which is that the self-confidence of any discipline can be gauged by the extent to which its adherents enjoy telling and taking jokes about themselves and their profession. This can be expressed another way: The more people have to defend, the more defensive they are – which is obvious, when you think about it. If you can think of exceptions, the response facility is at the bottom of this column.

Leading astronomers and naturalists, who enjoy prime-time exposure on television, are secure in the knowledge that the great, the good, and the public, see their profession as serious. Leading psychiatrists and palaeontologists write books that become *New York Times* best-sellers, full of amusing anecdotes, not to mention wild and woolly surmises, because they have no worries about being dissed (disrespected). On the other hand...

## ***Go on, have a chuckle***

Nutrition scientists? Name me two who currently are television personalities or who, apart from founder Association members Marion Nestle (4) and indeed Walter (5), have well-written books in print for the general reader. Outside Australia, you can't, can you? Just about the most that nutritionists may do to get their views or their causes well-known on television – maybe this includes you – is to pop up from time to time for a couple of quick head-and-shoulder-shots and 'noddies', sometimes styled as if A Doctor, briefed to utter a couple of sound-bites drizzling on about epidemic obesity, starving millions, portion sizes, or if a smidge *fringe*, allergies to additives or the perils of Frankenstein Food.

Hey ho! Smiles? Shared warmth with the viewers? Not a chance. Indeed, tell me the last time you read anything published by a nutrition scientist that made you laugh, other than in derision or bitter scorn. If you think what I am saying here is wrong, you know where to go – to the response facility.

## References and footnotes

- 1 And indeed, the circumstantial evidence that the Portuguese knew where the land now known as Brazil was, well before the official ‘discovery’ in 1500, is pretty conclusive. See Page M. *The First Global Village. How Portugal Changed the World*. Lisbon: Casa das Letras, 2002. On cod specifically, also see Kurlansky M. *Cod. A Biography of the Fish That Changed the World*. London: Vintage, 1999.
- 2 OK, a travesty, but I must tell you that all the italicised gobbledygook is, save some adjustments, to be found in recent documents whizzing round the e-circuit. Well OK, not EIEIO, which is a refrain in the song for children ‘Old Macdonald had a farm’. Given the appropriate documents or presentations, and an actual game, BULLSHIT! might be called not after 100 words, but say 400 words or say 20 slides.
- 3 Let me scramble to add that this outrageous generalisation applies more to nutritionists who see the discipline as a branch of biochemistry, who are less likely to read this column, than to public health nutritionists, who are more likely to do so. It does not apply to food policy folks, who are often a gas. It certainly does not apply to foodies, who are characteristically flamboyant. The hang-up is I think to do with the futile desire to identify nutrition as a ‘hard’ science..
- 4 Nestle M. *What To Eat*. New York: Farrar, Straus, Giroux, 2006.
- 5 Willett W. *Eat, Drink and be Healthy. The Harvard Medical School Guide to Healthy Eating*. New York: Free Press, 2001.

## Porto musings (5). Science in the public interest

### **Our need to be active**

One of my first experiences half a century ago as a new Oxford undergraduate – a ‘freshman’ – was attending the ‘Freshers’ Fair’, at which student societies and enterprises hawked their wares, and youths (and the few young women admitted to Oxford in those days) fixed themselves up with off-the-peg identities. Thus, you could join the Union, or the Conservative Club, or Footlights, or the Jazz Society, buy the weekly magazine *Isis*, get 10 per cent off your first curry, peas and chips at the Dildunia in Walton Street, or sign up to Ban the Bomb. My best memory is of the Apathetics. A languid figure approached me, said ‘I suppose you wouldn’t want to join, no of course you wouldn’t, it doesn’t matter’ and, before I replied, he sighed and retired. A story of gilded youth.

This encounter came to mind when I heard that a number of participants at the Porto congress – or, as they might call themselves, ‘attendees’ – were muttering that

the Association was giving space and scope on its website to ‘activists’. Shock! Horror! Since all meaningful terms have an opposite, I can only assume that the mutterers regard themselves as ‘passivists’.

### ***What is a ‘passivist’?***

So, what are nutrition passivists? Are they those folks who investigate the pantothenic acid content of biscuits formulated to be parachuted into remote areas of Afghanistan? Or, who thereafter undertake double-blind trials of two parenteral feeding regimes for Afghan children who were doubly blinded and whose feet were blown off as they scampered into the minefields to take the biscuits? Or are they those who make the case for traffic light nutrition labelling, for communities living in areas of cities where the traffic lights don’t work, or where it’s too dangerous for drivers to stop at night? Or who – to take a recent actual case – note the increase in portion sizes of packaged products in the Netherlands, and recommend that more research be undertaken into this aspect of the nutrition transition? Yes, I could go on and on. Flick through the contents lists of nutrition journals.

Ooh, very sardonic, you may be thinking. Please don’t get me wrong. Nutrition as a branch of biochemistry has its place. So does ‘community’ nutrition. Work like the above needs to be done – well, some of it – just as physicians are needed where there is famine, and surgeons are needed where there are battles. The level of standard nutrition science of this type is more routine. It is roughly on a level with that of the technicians whose job is to make sure that the bandages supplied to ravaged regions of the world are antiseptic and absorbent, and stamped ‘this way up’ on the right side in the correct language, as indeed they need to be.

### ***What an ‘activist’ is***

But this need not stop paramedics, or physicians or surgeons, or indeed nutritionists, lifting their gaze above their day-to-day duties, and asking why they have to do what they do, thinking about what are the forces that cause misery and suffering, and speaking out on what can be done to – yes, make the world a better place. That is, to think and act not merely as technicians, but as professionals in the full sense, meaning as humans, parents, friends, citizens.

How come – as far as I am aware – were there no presentations at the Porto congress, on the basic causes of the nutritional status of populations in Iraq or Afghanistan? Or indeed any reference at all to the state of these countries? Why no discussion of the drivers of malnutrition within inner cities in the USA, or indeed impoverished regions of Russia and former USSR? And how come presentations of the conditions of life of communities in sub-Saharan Africa usually made no reference to unfair terms of trade, the availability of machine-guns including to child ‘soldiers’, foreign debt, the reasons for and the implications of mass rapes, the collapse of primary health care systems caused by ‘structural adjustments’ forced on

national governments, and so forth and so on? Why? Some others present at Porto were saying out loud: 'Follow the grants'. (See next month's column for further thoughts on such matters).

Of course nutritional scientists are not trained in politics and economics. But we are conscious, we have consciences. As I see it, the moment we start to think as citizens, we become activists. Isn't this what *public health* nutrition is all about?

### *Transnational industry marketing*

## **Coke™ in Venice, and...**



Here is a test to check whether you are an activist or a passivist. Is your reaction to this picture (1), of a colossal monstrous Coke™ advertisement stuck in front of the *Palazzo Ducale* in Venice, complete with arc lights for illumination at night, as it is right now, personal, or professional?

That is to say, are you now thinking *tsch tsch*, this is offensive – or, if you are a Futurist, how great to see some zing and bling among those fusty ruins? Or, are you thinking that this advertisement, and the Coke™ vending machines already installed in 80 *piazze* in Venice (2), are harmful to health as well as being an affront, and should be removed? The personal reaction makes you a passivist. The professional reaction makes you an activist. Barrie Margetts, as an art lover, asks me if it is OK to have a conscientious and also an aesthetic reaction. Yes, and that makes you a tasty activist.

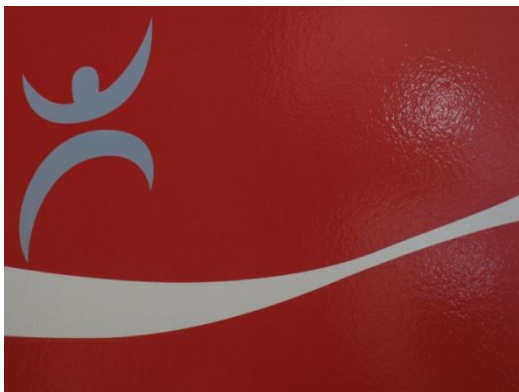
### ***Death of Venice***

What's happening in Venice? Why is the Coca Cola company being allowed to destroy the city in order to save it? My wife Raquel, who has lived in Venice

and knows the city's politics, explains. Previous campaigns to save Venice have been backed by the national government in Rome with lots of public money, to protect this world heritage. The current government, controlled by the maverick media mogul Silvio Berlusconi, either because of reckoning that Venice is doomed anyway, or because the Veneto region doesn't support the party now in power in Rome, is abandoning Venice to suffocate in its own sewage.

So the Venetian city fathers are desperate, and lo, Coke™, fresh from saving the world (3), is now giving some dosh to save Venice. This is a logical approach. After all, it's what the Coca-Cola company, and other transnational food and drink manufacturing and catering companies, are doing to save Africa, protect Amazonia, add lustre to the World Cup and the Olympics, and rescue the United Nations. Not to mention their munificent funding of universities, research institutes, and teams of scientists investigating the links between food, nutrition, and public health.

### ***Birth of Cokeistan™***



Veteran students of industry game-plans discern an altogether more imaginative strategy. Whole countries and states are or have been named after individuals. Bolivia, Rhodesia (North and South) (as was). Victoria, Alberta, Pennsylvania, Carolina (North and South), Rondônia, Louisiana, Washington (state as well as DC), Tasmania. And of course two continents – the Americas, named after Amerigo Vespucci. Not to mention the top saints.

So, who and what makes the world wag now? We are not merely talking Gatesville or Nooyiton. We are talking implications of a logical next step, with massive moolah being donated by transnational companies and placed into the treasuries (and in some cases the Swiss bank accounts) of grateful potentates who rule various low-income states mired in foreign debt, that thereby will in due course become Greater Danonia, The Federated States of Nestlé, South Pepsylvania, Yum!Land, and quite simply Mars. Not to mention the World Big Mac Health Organization. Oh yes, the flag that introduces this item. Familiar? It's the logo, complete with the corporate swoosh, of the Beverage Institute for

Health and Wellness, an inspired name for what is actually a public relations arm of the Coca-Cola Company. And the logo? Also an inspired design, for surely, it is a flag. The flag of Cokeistan™.

Impossible? Preposterous? Look what's happened to sport. And where else can United Nations agencies and impoverished national governments turn to, for money to survive and do their good work? Remember, you read this here first.

### *References*

- 1 Kington T. Venice's historic buildings 'violated' by billboards, say cultural experts. *The Guardian*, 3 October 2010
- 2 Cannon G Coke™ in Venice, and other items. Out of the Box [Column]. *Public Health Nutrition* 2009; **12**, 6: 789.
- 3 Gomes F. Six hours of words from our sponsor, and other items. [Column] Website of the World Public Health Nutrition Association, October 2010. Obtainable at [www.wphna.org](http://www.wphna.org)

### *Science and its limits. Numbers. Values*

## **Describing a rose with a ruler (1)**

Now for a more considered item. When you visit Rio de Janeiro, do spend some hours in its botanical gardens. They were founded by Dom João VI in 1808, his first year in Brazil as emperor of all Portugal's possessions (1), and therefore are near the centre of the modern city. They are a protected place of magnificent tropical tranquillity, too big and as yet too rustic to be crowded. This summer they included an exhibition in one of the restored colonial buildings, of enormous close-up photographs of Brazilian nature – such as a hornet's sting, a dragonfly's wing, a crocodile's eye, a leaf with dew, the carapace of a giant beetle. The visitor's book was full of comments like 'wonderful, miraculous, awesome'. Indeed so.

The exhibition also included a prominently displayed statement. Translated back into the original English, this was: 'When you can measure what you are speaking about, and express it in numbers, you know something about it; but when you cannot measure it, when you cannot express it in numbers, your knowledge of it is of a meagre and unsatisfactory kind; it may be the beginning of knowledge, but you have scarcely, in your thoughts, advanced it to the stage of science'.



### *Care has no number*

That's odd, I thought. Something strange here. Natural history is usually regarded as a science, and it has been advanced by classification and measurement. But what was the purpose of the placing of this saying of William Thomson, Lord Kelvin, in the midst of beauty? Raquel my wife read the quotation differently, as an ironic comment on reductionist science, and perhaps that was the intention.

Back home I remembered that James Clerk Maxwell, who with William Thomson and others harnessed electricity, and in this and other ways did much to begin the modern world, said something that sounded similar. He stated: 'All the mathematical sciences are founded in relations between physical laws and laws of numbers, so that the aim of exact science is to reduce the problems of nature to the determination of quantities by operations with numbers'.

Then I pondered, and then I realised what they were both saying. One clue, in both cases, is key words in these statements: 'knowledge' and 'science' with Kelvin, and 'mathematical' and 'exact' with Maxwell. The other clue is their professed religion: they were both devout. This alone proves that they never intended to suggest that science is the measure of all things. God has no BMI. Rather, what they were saying is that the practice of science is that which can be measured. They could not have been suggesting that there is no other territory.

In delineating the work of science, and scientific knowledge, they were therefore also indicating the limitations of science as they saw them (2). As practicing Christians they would have thought that much of what is most real, and as such felt and experienced, is not and cannot be known, in the scientific sense of that word. Did they think that in a universe from which the God in which they believed was subtracted, everything could be reduced to numbers? This seems to me to be utterly unlikely.

As I wrote this, my 6 year-old son Gabriel yelled: 'Bye-bye Daddy!' Raquel was taking him and his cousin and pal Pedro, for lunch with her father. So I went downstairs to see them off. 'Watch out for the *lagarta!*' said Gabriel. He had noticed a caterpillar with poisonous hairs, out of its leafy element on a stone wall from which I might otherwise have rescued it by hand. 'Thanks' I said, and came in smiling. He is a thoughtful child. Such simple experiences, that parents may enjoy any day, are not measurable, except in rather trivial ways. They are outside science. They are part of life as a whole, of which science is also one part.

## *Wonder has no number*



You don't have to believe in God the Creator, to realise that much or most of what is most meaningful is, in the strict sense of the word, metaphysical. Perhaps there are forty separate systematic disciplines that enumerate the universe, beginning even before Egyptian astronomy and calendrical systems, but none of these add up to the experience of sunset. A fundamental reason why they cannot, is that such systems are structures that are seen as being independent of us, whereas the human experience necessarily involves us. One of my favourite pictures of Gabriel is the one above of him as a baby, reaching up to touch the first soap bubble he ever saw, already amazed. The sense of wonder must not disappear. James Clerk Maxwell very likely knew this. He wrote verse, and in 1861 also produced the first permanent colour photograph, of a tartan ribbon, using quantified techniques. Here it is:



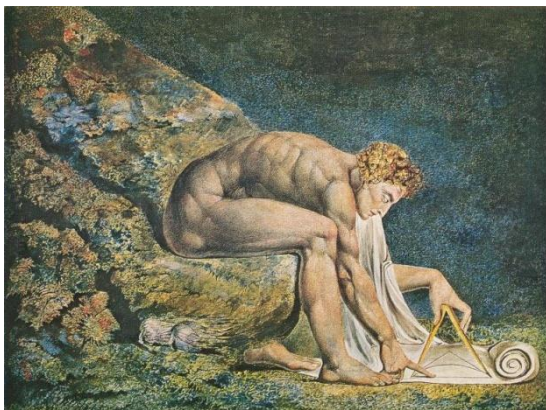
My guess is that what he felt 150 years ago is what we can still feel now, of such astounding revelations, and indeed of what is in front of us every day, especially if we live with nature. By day here sometimes great iridescent blue butterflies circle one another in our garden, and by night little lizards come out from under the wooden ceiling in my room and, their sticky feet splayed on the window in front of me, wait for, pounce, and devour mosquitoes. Awesome. Miraculous. Wonderful.

The problem with science as it is now generally understood – in particular by those who are conventionally trained in any discipline identified as scientific – is partly the identification of all types of knowledge with what is measurable, which obviously was never the intention of William Thomson and James Clerk Maxwell. It is also the overlooking and ignorance of values, which orthodox scientists seem to think have been thrown overboard with the jettisoning of God. But conventional modern sciences characteristically abhor or abjure values and, instead, accumulate ‘data-sets’ using recondite mathematical techniques, and seem to imagine that manipulation of the numbers (‘crunching’ them, as the phrase goes), will of itself produce solutions (2-4).

As one example, this accounts for the supremacy and catastrophic impact of Chicago school monetarist economics, which relies on arcane mathematical modelling. In my opinion, this also accounts for the generally piffling impact of current orthodox nutrition science on public health. An exception is breastfeeding. The reason for this exception is that, mainly because of the pressure put on the scientific community and governments by civil society organisations, breastfeeding is accepted as an issue of principle, and as a human right. It has broken free of the numbers game.

### ***Principles have no number***

William Thomson and James Clerk Maxwell were surely being proper and precise in saying that the practice of science is that which can and should use numbers as measures. Geniuses though they were, if they thought that the entirety of any science can be quantified, they were mistaken. All systematic disciplines are founded, explicitly or implicitly, on principles, which include value judgements. Values cannot be derived from facts. William Blake, whose vision of Isaac Newton as a man who imagined he could replace God, and who therefore was mad, made his point with his picture below of Newton as the universal geometer, alone, naked, with his instrument of measurement.



Numbers do not measure all things. Any art, for a start. Yes, it's true that there are Fibonacci Sequences and Golden Means and Serpentine Lines that can be traced in painting, sculpture, architecture, and other arts. But these are not the arts themselves. Nobody would ever say that a symphony is its score.

The same applies to ethics, and to ethical principles, which are what we should live and work by, as citizens and professionals. The usefulness of any principle can be tested empirically, which implies enumeration. But it is the nature of principles, and indeed any norms or values, to be, in the strict sense, metaphysical. Unfortunately, this is why conventionally trained scientists evade principles and values. In doing so, they drain their work of meaning.

Above all, what escapes the measurers, are the mind, emotions, wisdom, consciousness, and life itself. These are what is special about the human species, and the whole living and physical world. As did Lord Kelvin and James Clark Maxwell, we should use and respect quantification, with all the knowledge it brings, and at the same time know that numbers and measurements are tools, and that is all.

### *Footnotes and references*

- 1 Wilcken P. *Empire Adrift. The Portuguese Court in Rio de Janeiro, 1808-1821*. London: Bloomsbury, 2004.
- 2 Stephen Jay Gould had a bash at making the distinction, in his book The Rocks of Ages (New York: Ballantine, 1999). He says: 'Science tries to document the factual character of the natural world, and to develop theories that coordinate and explain these facts. Religion, on the other hand, operates in the equally important, but utterly different, realm of human purposes, meanings, and values – subjects that the factual domain of science might illuminate, but can never resolve' He adds a joke: 'To cite the old clichés, science gets the age of rocks, and religion gets the rock of ages; science studies how the heavens go, religion how to go to heaven'. This is claptrap. He seems to be saying that all things can be grouped together under either science or religion, which is absurd. He certainly is saying that 'purposes, meanings, and values' belong within religion, which unless 'religion' actually means 'philosophy of life' is pernicious. Priests down the ages have tried to purloin ethics, but we do not have to go along with them. Furthermore, science without ethics is extremely dangerous, as the very clever technicians who made the first atom bomb came to realise.
- 3 This is not the first time I have pointed out that the function of mathematics in modern science is in effect identical with the function of Latin in mediaeval religion, to bamboozle all but The Elect.

- 4 It seems generally to be supposed that because scientists of any type now shift vastly more information than their predecessors of 20, 50, 100 or 200 years ago, and because the world privileged people live in now is technologically transformed, that scientists now are wiser. Not so. After a while, knowledge drives out wisdom. What scares me about scientists, including those specialising in nutrition, is that first, there are far too many of them, and second, that the process of becoming professionally qualified forces all but the most imaginative and energetic to know almost nothing outside their technical trade. You think this is too savage? Try asking a colleague to name three paintings, poems, movies, and novels, that celebrate food. Now ask yourself the same question. I am inclined to trust nutritionists who, like my esteemed colleague Martin Wiseman, are masters of the art of cooking.

*Science and its limits. Numbers. Values.*

## **Describing a rose with a ruler (2)**

His mind, that was his best companion, was thinking La Gloria. She said La Gloria. It has nothing to do with glory nor La Gloire that the French write and speak about. It is the thing that is in the Cante Hondo and in the Saetas. It is in Greco and in San Juan de la Cruz, of course, and in the others. I am no mystic, but to deny it is as ignorant as though you denied the telephone or that the earth revolves round the sun or that there are other planets than this. How little we know of what there is to know.

*Ernest Hemingway  
For Whom the Bell Tolls*

Life at home and at work usually goes well when I am also reading a novel. Sometimes I return to an author, and lately this has been Ernest Hemingway, the master of plain language. Here the main character, Robert Jordan, who knows that he will almost certainly die that day, is naming the expression of great love when in love, using a phrase for a transformative experience he – or rather Hemingway – has also sensed in the most intense Spanish song, painting, and contemplation.

### *Life has no number*

This comes back to the question of whether nutrition can be properly understood in terms of numbers. The answer, it seems to me, remains the same. It can be, but only to some extent, only in its less significant aspects, and only in ways that reduce its meaning. A meal can be characterised and classified countlessly. But none of these amount to the meal itself, and the savour and

relishing of it which is also part of its nourishment, any more than an anatomy amounts to the living being. Being alive and conscious remains a mystery. Life has no number.

## **Acknowledgement and request**

*You are invited please to respond, comment, disagree, as you wish. Please use the response facility below. You are free to make use of the material in this column, provided you acknowledge the Association, and me please, and cite the Association's website.*

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*November blog: Geoffrey Cannon*  
**Respond here please**