WN *Columns*

World Nutrition **Volume 5, Number 1, January 2014**

Journal of the World Public Health Nutrition Association
Published monthly at www.wphna.org/worldnutrition/

What do you think?

Geoffrey Cannon



More spirals: Goat horns; a fractal; a rose in bloom; fiddle-head ferns; Pablo Neruda with shells
Straight lines and numbers are ways to master nature but do not show us how to live in the world

Juiz de Fora. Hot stuff this month, written from home here in the state of Minas Gerais where most of the world's gold once was dug, during hot thunder and lightning midsummer days and nights. The world is different from the global South. And now, a Chilean Pope, and the World Cup to be played in the tropics in Brazil!

Below I start with another meditation on the significance of the spiral form. Then the third in the series with the general title 'What they believe', on remarkable people whose work is outside current conventional nutrition and public health. After the philosopher Mary Midgley and the historian Robert Skidelsky, it is time for a biological scientist. So below I celebrate the Canadian biochemist Ross Hume Hall, who 40 years ago got it right about hydrogenation, trans-fatty acids and margarine.

Next is a 'stop press' item, prompted by a paper masterminded by David Stuckler published by *PLoS Medicine.* If investigations into sugar and weight gain funded by Big Sugar are compared with those that have no industry funding, do their conclusions differ? Then I continue the series 'What I believe'. Belief #11 has the theme 'Human life is not sacred'. Why are people who are in long deep comas kept artificially respired and fed when really they are dead? Why are longer and longer human lifespans a prime public health and nutrition goal, irrespective of how disabled and diseased elderly people may be? Tough questions, and no slick answers.

The Uruguayan champion of liberty Eduardo Galeano has denounced the prevailing idea of the lived world as a racetrack or a battlefield, with what this implies. In this spirit, the final item in this issue's column is on money as the measure of all things, including of 'the smartest ways to save the world'.

Box 1

Spirals, cycles, and the secret of life



The German chemist August Kekulé (left) said that he saw the atomic structure of benzene dreaming of an ouroboros, symbol of cyclic systems in which a serpent swallows its tail

This and other columns of mine include series of spiral images, like those on the previous page of a goat's horns and of fiddle-head ferns, of a fractal, and of a rose in bloom, and a shell shown together with its collector the Chilean poet and Nobel prizewinner Pablo Neruda. These all speak to us, about nature, and also with the fractal, complex systems. For new readers, the spiral is the motif of the *New Nutrition*, which defines the science as an inter-related biological, social, economic and environmental discipline

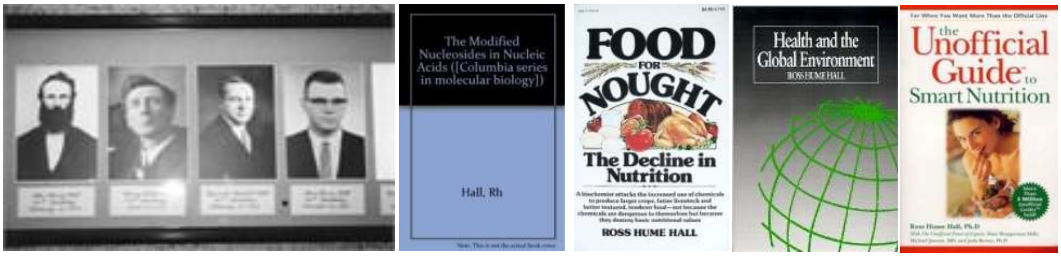
Every science student knows the story of the German organic chemist August Kekulé (1829-1896, left above) and the ouroboros (next to right, above). His story was that he solved what was up to then the mystery of the structure of benzene, after dreaming of the snake that forever swallows its own tail (see the cartoon, next to left, above), the symbol of the continuity of time, life and cyclic systems. This unlocked the secret of the structure of benzene and thus of all aromatic compounds. The discovery was celebrated in Germany with a stamp issued in 1964 (right above). In 1890 Kekulé said that he also had a vision of atoms and molecules dancing, which explained to him the dynamic nature of atomic structure. Such ideas are well understood in the East and by physicists – a book on the 'new physics' has the title *The Dancing Wu Li Masters.*

The story of the ouroboros is usually told as an amusing diversion from the rational 'straight and narrow' approach to science. But atoms and molecules do dance, and chemical structures are dynamic. This is not conveyed by diagrams, just as the theory of the fundamental importance of spiral structure is in a sense contradicted by writing about it in straight lines, as here. These realities need to be shown as movies. Most education teaches us to 'think straight' and not to 'go round and round in circles'. (True, circles are not the same as spirals). We are praised for 'coming straight to the point'. Tony Blair, accused when newly UK prime minister of corruption, by favouring an industrialist who had donated £1 million to Labour Party funds, denied this by going on television in 1997 and saying that people who knew him thought that he was 'a pretty straight kind of guy'.

Pablo Neruda expressed his understanding of nature and of human nature in his love for shells and their spiral shape, showing growth of life, knowledge and insight. Likewise, August Kekulé revealed chemical and biological nature in telling the story of his dream. We need rules and measures and lines and numbers for ordinary work and life. But to go deeper and higher we must dance on and round and out, ever expanding our wisdom. This may give some idea of why with colleagues I believe that the spiral shape is indeed a symbol, and that it discloses the nature of nutrition not abstractly, but in the real world.

Food and nutrition, health and well-being

What they believe: 3. Ross Hume Hall
Technology as servant



Ross Hume Hall aged 40 is on the right of the pictures. As shown above, his work was at first strictly academic biochemistry. He then committed himself to general health and to the ecosystem

Ross Hume Hall (1926-2003), was a biochemist who applied his academic knowledge to industrial food systems. His key book, *Food for Nought* (above), published 40 years ago, states that food technology is out of control, and in particular, that *trans*-fatty acids and the process of partial hydrogenation that generates *trans*-fats are a disaster. As a key example he wrote: 'North Americans have been subjected unwittingly to a massive experiment involving consumption of unnatural fats since about 1914, when margarine and hydrogenated cooking fat were first sold commercially' (1). He exposed *trans*-fats almost 20 years before they were 'on the map'. The book has over 400 detailed references, many to orthodox literature from the 1950s to early 1980s.

His first book, *Modified Nucleosides in Nucleic Acids* (1971), was academic. He was never well-known, except to colleagues and to readers of his subsequent books then or later. *Food For Naught* (1974), based on a course he devised at McMaster University in Canada, where he was head of the biochemistry department, was his second book. It is dynamite. In it he 'went public'. The book is unlikely to figure on any nutrition student reading list. It is now out of print – my own copy is falling to bits.

'What is new' he says 'is the enormous power and sophisticated know-how of a modern industry that subverts and reforms natural processes on a global and a molecular scale. Mechanisation with its reorganisation of living processes in the name of human nourishment has resulted in a totally new and contrived biologic ideology in which man is processed as much as any other element of the defined system'. Further: 'Failure to monitor and to appreciate the results of rapidly moving technologies produces a brutal effect… Technology based on mechanistic laws clashes head on with the processes of a natural world…Modern industry, ignoring these biologic laws, moulds and manipulates natural processes to suit its own mechanistic and economic goals'. He was not against technology. What horrified him was technology that had become a monster, whose nature, impact and consequences were not understood even by the technologists. This is all true now.

Now I remember reading all this for the first time maybe 30 years ago and thinking much the same as I did then about *Medical Nemesis* (1976), Ivan Illich's take on health care. All good rumbustious stuff, I thought, but not something to cite, quote or mention. Too wild and ragged, I thought – and Hall did obviously lack a firm editor. But how wrong I was! On food technology and its implications, he knew what he was writing about. At that time no-one in the field, with exceptions like Fred Kummerow the veterinary biochemist at the University of Illinois, at the end of 2013 still going strong at the age of 99, saw and spoke out on the dangers of *trans*-fats.

Ross Hume Hall then wrote *Health and the Global Environment* (right, above, 1990, also out of print). He then tried his hand at a 'how-to', *The Unofficial Guide to Smart Nutrition* (2000) which, with its rather rustic website, was as far as I know a flop. He did not act as if he was a superstar and never gained a big following. By that time he had moved from Ontario to Vermont and was unwell. A note from his family on his death says 'Ross was a voracious reader, fitness enthusiast, gardener, organic cook, sailor, traveller, opera buff, steam train aficionado, accordionist'.

Butter, margarine, which was terrible stuff?

My own journey in nutrition has circled me back to Ross Hume Hall. As a journalist and then an author and advocate in the 1980s, one view I retained from a vaguely hippie-type attitude to food, was that margarine was terrible stuff. I based this on the principle that anything edible that smells and tastes foul must be foul. My stepmother Elise, now still sharp as a tack aged 94, felt much the same way. She read Adelle Davis, had a number of health-food cookbooks, and made delicious dishes based on animal organs like hearts, brains, liver, kidney, bought at the local butcher's.

In the 1980s I learned and accepted the modern and still current view on diet and health and therefore kept quiet about hippie natural food notions and in particular about butter. Along with meat, cheese and eggs, butter had become demonised as terrible stuff, and was bracketed with biscuits, cakes, chocolate, confectionery, snacks, ice-cream, pop and other ready-to-consume products, as heart-busters.

In early 1984 I accepted an invitation from the Unilever public relations boys to be part of a jet-load of writers going to a grand gathering of the American Heart Association on cardiovascular epidemiology held in Tampa. This made me joke that Florida had become Flora with an added Id. The occasion was announcement of what seemed to me to be the dud results of the Pharaonic Lipid Research Clinic Coronary Primary Prevention Trial. This was designed to show that diets low in saturated fat reduced the incidence of heart disease, but in the event it squeezed out numbers just hovering above statistical significance, which also seemed to me to be off the point. The big-shot epidemiologists running the study patiently explained to us that the results were awesome. Knowing which way my bread was marged, with a guilty conscience I wrote some faintly obedient stuff for *The Times* (2). But this was my one and only freebie. The boys from Flora did not laugh at my Flor(id)a joke.



Shortening and margarines. Housewives' friend in 1912, country-fresh in 1930s, glamour accessory in 1954 (this is Rita Hayworth) and then from the 1980s Flora, the way to save your man's heart

Jerry Stamler's declamations

Yes, I did accept the diet and heart disease prevention message, which then was being promoted vigorously in Britain by nutrition scientists and epidemiologists. But I was curious about the prevention industry, and wondered if it was my fate to promote margarine in its new phase as sort-of heart disease medicine (see above).

What awed me at Tampa was scale. All that money! Later I had tea in London I think at the Ritz with Jerry Stamler from Northwestern University Medical School in Chicago, who had presided at the AHA meeting. He is a mastermind of the consensus position that diets high in saturated fat, cholesterol and salt are a principal cause of coronary heart disease. Now aged 94, he is I believe still active. Asked at Tampa about the cost of the LRC-CPPT trial, he named the price which I think was in the region of half a billion dollars and roared PEANUTS! This was power and glory making history stuff! Tens of thousands of professionals and hundreds of thousands of participants had, he declaimed, 'turned the flank of this huge problem' (2). A kind of battle of the bulge, I thought. Unworthily, it occurred to me that with grants of that scale, it would take a hair-shirt saint chief investigator to play down the results. Even more unworthily, I failed to mention this in my *Times* piece.

To appreciate the Ritz story you should know that Jerry is very short, not much over 5 foot (maybe 1.60 metres). Our China tea arrived, with scones, and…. As the waitress moved away, Jerry roared HAVEN'T YOU PEOPLE HEARD, called the waitress back, thrust the saucer with pats of butter at her, and demanded Flora, snapping I SUPPOSE YOU HAVE HEARD OF IT, which duly arrived in the form of a pile of personal-type packets that make your thumbs greasy as you open them. By this time half the people in the room were staring. Coward as I am, I said to Jerry that I preferred scones just with jam.

Norbert Wiener's declaration

Do you sometimes have the experience of hearing, seeing or reading something that seems to mean nothing special at the time, but which stays and grows in you? This uncomfortable phenomenon happens to me occasionally, and in the context of butter and margarine, here is the example. Norbert Wiener of Massachusetts Institute

of Technology (1894-1964), one of the creators of cybernetics and thus a father of home computing, wrote a book on the meaning of his work, and of the then modern science and technology, published in 1950 (3). Browsing within it, round about the time of the Tampa experience, a passage seeped into the back of my mind. He said:

> The change in the dietary… habits of the human race has been profound and will become more profound as our natural food supply runs out… These changes may not all be innocent. With our modern chemical technique we can hydrogenate or dehydrogenate fats as we please... We must always be on the watch that small quantities of catalysts used in transforming our food oils do not have slow poisonous effects, which it may take a lifetime to show…It is certain that the processing of foods is subjecting us to many risks universal to the nation if not to the race, which may not show themselves until it is too late to do anything much about them

Well – what did Norbert Wiener know about food science and technology, one could think. But one the other hand, what do nutrition scientists in general know about food science and technology. Not a lot. It is usually not significant on the curriculum. What Norbert Wiener wrote burrowed in my mind, and so I sought reassurance, and consulted a textbook on margarine (4).

This said: 'There have been extensive developments in the application of hydrogenation procedures to fats for margarine manufacture… The complex technological aspects are not of special nutritional significance… In the manufacture of margarine the hydrogenation process is carefully controlled, so that the final product is acceptable to the consumer and readily digested and assimilated'. And: 'Considerable attention has been paid to the biological effects of *trans* fatty acids'. Ah! And? 'At present there is no reason to suppose that they have any harmful effects; they are metabolised and utilised in the same way as other fatty acids… Trans acids are found in human adipose tissue; where they are presumably derived from the diet'.

This, it dimly occurred to me at the time, is what Norbert Wiener was declaiming about and Ross Hume Hall was complaining about: the careful discussion of technology as if it is merely technical. In the early 1990s I chatted to Craig Sams of Whole Earth Foods, a neighbour of mine then, who lived about the admirable wholefood shop of the same name (previously Ceres) in Portobello Road. Listen, he said, let me explain the hydrogenation process to you, and let me show you what *trans*-fats look like. Hard plastic balls. Do you want to eat this stuff? No, I did not, and I had come full circle back to my hippie wholefood days. Mind you, I kept quiet about it. It was not consensual then, to demonise margarine.

Box 1

Books by Ross Hume Hall

Modified Nucleosides in Nucleic Acids (1971); Food for Nought: The Decline in Nutrition (1974); Health and the Global Environment (1990); The Unofficial Guide to Smart Nutrition (2000). All out of print, but the later three books may be available on Amazon.

Technology as servant

Ross Hume Hall interested me, at the time I first read *Food for Nought,* for an additional reason. He wrote that one inspiration for him was his fellow Canadian the sage of modern communications Marshall McLuhan, who I knew and admired. Marshall himself had been influenced by Siegfried Giedion's masterpiece *Mechanization Takes Command,* published in 1948, which I inherited from my father after his death in 1986 and cite incessantly. Just as the stirrup explains the astounding incursion of the Mongol Golden Horde from Mongolia to the gates of Vienna, the disassembly lines of the Chicago slaughterhouses, the steel roller mills, and other inventions, explain the phenomenal creation of industrialised food supplies and with it the very rapid increase of urban populations. But the speed of change has outpaced human capacity to adapt. Recently I have been prompted to read *Food for Nought* again, more carefully. Hence this celebration. This is what it says:

> The gap between the capacity of human biology and the demands technologic society places on it is… widening at an ever increasing rate. The technologic disease pattern is a manifestation of the gap, and… the dietary habits of technologic society are the main contributory factors…Technologic society demands that the technologic diet be eaten: any difficulty human biology has in adapting will *[or so it is believed – Ed]* be compensated for by technical progress in treating the side effects… Medical scientists recognize that dietary factors are important, but they seek a solution to heart disease that does not disturb the basic technologic dietary patterns, a solution that conforms to the objectives of the technologic food system'.

On *trans*-fatty acids. Ross Hume Hall has been proved right. On the impact of technology on food systems, dietary patterns and human health, I believe that he is also essentially right. He did not say that technology is inherently problematic. That would be as foolish as to say that food processing is of itself unhealthy. Such generalities make no sense. What is needed, are food scientists and technologists whose commitment is to health and well-being, and nutrition professionals who have a full understanding of food processing technology.

It is time to make food technology a servant, and to distinguish between benign and malign food processes. A new consensus is needed, shared between leaders of international agencies, national governments, health and civil society organisations, the media, and also industry willing and able to change. This is that food processing is the fundamental determinant of the nature and quality of industrial food systems and dietary patterns.

As a first action, hydrogenation of all types, partial and complete, should by statute, be no longer used to manufacture products designed to be eaten, and other sophisticated alternatives should be investigated with great care. That reform alone would go a long way to regenerate industries whose leaders want to supply healthy food products, and would protect healthy food systems, and human health, worldwide. When this reform is announced, tribute should be paid to Fred Kummerow and to Ross Hume Hall.

References

1 Hall RH. *Food for Nought. The Decline in Nutrition*. New York: Vintage, 1974.

2 Cannon G. Lifestyle with a death knell. *The Times*, 30 March 1984.

3 Wiener N. *The Human Use of Human Beings. Cybernetics and Society*. London: Eyre and Spottiswoode, 1950.

4 Fraser A. Nutritional and dietetic aspects. [Chapter 4]. In: van Stuyvenberg J (edit); *Margarine. An Economic, Social and Scientific History, 1869-1969*. Liverpool: Liverpool University Press, 1969.

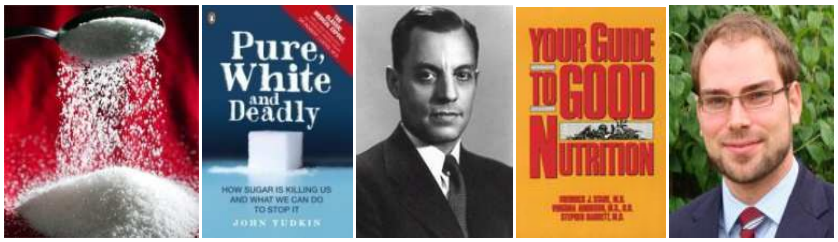
5 Giedion S. *Mechanization Takes Command. A Contribution to Anonymous History*. New York: Oxford University Press, 1948.

Cannon G. What they believe (3). Ross Hume Hall. Technology as servant What do you think? *[Column] World Nutrition January 2014, **5**, 1, 71-76*

Conflicts of interest

Sugared words

Access December 2013 PLoS Medicine on conflicts of interest here



Sugar: what's the story? Is it deadly, as John Yudkin said? Is the issue saturated fat, as Ancel Keys (centre) insisted? Is sugar harmless, as Fredrick Stare said? David Stuckler (right) casts some light

This isn't a dispassionate account of sugar and health. That would take a book. No, it would take a shelf of books, most not written in any kind of neutral tone. Sugar and the slave trade (1). Sugar as crucial to the economies of many countries, big like Brazil and Australia, small like Cuba and Mauritius. Sugar and the parliamentary 'sugar interest' power block in 18th century Britain. Sugar as instant energy. Sugar and its addictive powers. Sugar and the creation of the British sweet tooth. Sugar daddies. 'Sugar' as a term of affection. 'Sugar, Sugar' and other pop chartbusters with sugar and such-like words in the title. Sugar perceived as a nutrient and also as a food. This item is not about such interesting themes. Some other time!

The Royal Society of Medicine meeting

The item here is about the influence of the transnational and other big manufacturers whose profits depend on the use of sugars and syrups, the sugar producers and

refiners, and their associated organisations. That's big business. Specifically it is about Big Sugar's influence on scientific research on sugars, health and disease.

Here is a story from the late 1990s, when I lived in London and was a member of the Royal Society of Medicine Food and Health Forum. The first chair of the Forum was the gastroenterologist Francis Avery-Jones. His successor was Tony Leeds of King's College London, another fibre man. Tony sent a note round to Forum members saying he had arranged a meeting on Sugar and Health, to be addressed by the research manager of the Sugar Bureau (since 2012 Sugar Nutrition UK, with the catch-line 'researching the science of sugar'). Being peeved, I objected to Tony, who explained that some really interesting findings on sugar were coming out, that the invitation had been sent, and why didn't I chair the meeting? Charmed, I agreed.

To make sure the meeting was lively I invited Prakash Shetty of the London School of Tropical Medicine, and Aubrey Sheiham of University College, London. There was a good turn-out. The Sugar Bureau presenter made a detailed, interesting and persuasive show, which overall indicated that sugar, maybe apart from dental caries (so brush your teeth with fluoride paste) was part of a balanced diet, unless like any other nutrient it was consumed in excess. Then it was my duty to ask questions. A thought had popped into my mind, in the form of a question to which I did not know the answer. Perhaps, I said, I could ask a question myself. At some time in the past – I said – there had been some commotion about research being funded by the sugar industry. Could the speaker tell us how many of the studies cited in the presentation had been funded by the sugar industry?

The answer given was: all of them. The speaker asked, rather firmly, if I was impugning the integrity of the scientists responsible for the research. It was better, I suggested, that I open the meeting for discussion, so I asked Prakash and Aubrey, as two full professors, if their sense of the weight of the evidence as presented was affected by knowing that it all had been funded by the sugar industry. They both said yes, it was affected. After all, if it is disclosed in a court case that a witness for the defence is the partner of the defendant, their evidence is discounted. The mood in the audience at the RSM Forum meeting shifted. The presenter was not pleased, understandably. My question was of a type that while often discussed over drinks, is usually considered improper.

The PLoS Medicine paper

This all came to mind on the first day of January, when a paper published by *PLoS Medicine* arrived (1). The sugar and associated industries have for half a century now, systematically funded scientific research. A motive has been to have papers in peer-reviewed journals that would refute claims such as those made by former Queen's College London professor of nutrition John Yudkin (his book on sugar second from the left, above) that sugar in amounts typical in Western diets are an independent cause of obesty, diabetes, heart disease and what is known now as the multi-organ

metabolic syndrome. The industry has also promoted the views of powerful nutrition scientists. One example in the US was Ancel Keys of the University of Minnesota (centre, above) whose concern was dietary fat. Another example was Fredrick Stare of Harvard University (his book on healthy eating is next to right) who believed in the 'balance' theory according to which all foods and products can form part of a healthy diet, and who proudly acknowledged munificent funding from industry for his department's research. This strategy has been successful.

Sugar industry infiltration of scientific research still occurs, as the *PLoS Medicine* paper shows. Guided by editor David Stuckler (right above), a group of investigators from Spain and Germany has systematically reviewed systematic reviews on the relationship between consumption of sugared soft drinks, and weight gain. A total of 17 reviews were examined. Of these, 6 were funded by conflicted sources – the sugar and associated industries. Of these, 5 found no association. A total of 11, one of which had 2 conclusions, received no conflicted funding. Of their 12 conclusions, 10 found an association. The authors conclude: 'The scientific community should make special efforts to preclude funding by parties with vested interests at all levels, to sustain the credibility of nutritional science'.

There is more. A year ago the *British Medical Journal* published a paper from Jim Mann and a team from the University of Otago (2), commissioned by WHO to inform its current deliberations on the role of added sugars on weight gain. The paper's conclusions are rather mild, for the analyses studied by the team did not all find significant positive associations. But if the list of papers studied is compared with the list in *PLoS Medicine*, it turns out that the Otago team did not exclude papers funded by the sugar and associated industries on the grounds of conflicted interest. If they had done so their own conclusions would have been different.

Notes and references

1 These are some of the themes of Sidney Mintz's wonderful book *Sweetness and Power. The Place of Sugar in Modern History*. New York: Viking, 1985. Of the others, the story of Afonso Fanjul's call to the Oval Office is easy to google. On sugar, the slave trade and capitalism the outstanding book, by Robin Blackburn, is *The Making of New World Slavery. From the Baroque to the Modern 1492-1800*. London: Verso, 1997.

2 Bes-Rastrollo M, Schulze M, Ruiz-Canela M, Martinez-Gonzalez M. Financial conflicts of interest and reporting bias regarding the association between sugar-sweetened beverages and weight gain. a systematic review of systematic reviews. *PLoS Medicine* 31 December 2013, 10(12): e1001578. doi:10.1371/journal.pmed.1001578

3 Te Moranga L, Mallard S, Mann J. Dietary sugars and body weight: systematic review and meta-analyses of randomised controlled trials and cohort studies. 15 January 2013. *BMJ* 2013; 346 doi: http://dx.doi.org/10.1136/bmj.e7492

*Cannon G. Conflicts of interest. Sugared words. What do you think? [Column] World Nutrition January 2014, **5**, 1, 76-78*

Birth, life, death

Human life is not sacred



People who live well, live on as long as they are remembered, and are immortal when what they stood for when alive resonates for ever. The end of a good life is a time for remembrance and celebration

Why does public health and nutrition teaching and practice evidently believe that the bigger humans are, the younger they become sexually mature, the more there are of them – and also that they longer they live – the better for the species, future generations and the planet? Isn't it obvious that taken together – and individually also – in practice these beliefs are making humans more greedy, miserable, diseased and destructive? They seem to stem from a kind of ideology, from some sort of worship of ourselves as a species. Here is short item introduces this large theme, to be continued in my next column.

See above how the people of South Africa commemorated the life, achievements and witness of Nelson Mandela after his death in December at the great age of 95. The mood has been a little like that of a Celtic wake, in which people come together when a loved person dies to sing songs, play music, enjoy themselves uproariously, and so become the midwives of the immortality of the person who has died. In sane cultures, people who die do not die. They live on in the minds and hearts of the living, and in the bodies of their descendants, and may live forever.

Seen like this, death is not dreadful. There is a time to die, just as animals and plants and all living things die. The notion that human life is divine and that it must be preserved almost no matter what, fades away.

For me one of the most bizarre headlines in a UK daily newspaper at the beginning of January was 'Ariel Sharon's life in danger'. The story went on to remind readers that the Israeli former prime minister has been comatose since 2006, after a massive stroke. Apparently despite receiving the full treatment, various vital organs were

'critically malfunctioning'. Heads of state and senior officials from friendly nations had been alerted come to Israel and pay their respects at the funeral.

A different contribution to the same paper was published on the same day written by the novelist Margaret Drabble, now in her mid 70s. 'We are denied the right to die with dignity. It is grotesque', she declared. 'When it's time to go, let me go, with a nice glass of whisky and a pleasing pill'. She has also written: '**I** used to believe life would come to a sudden end, like my mother's did – she went to sleep and didn't wake up – but I now realise she was extremely lucky and it's more likely that they just keep bringing you back again and again, even if you don't want to be here any more'.

Now for a different situation, that of a man in his 70s who has chronic obstructive lung disease, bronchitis and diabetes. He needs an oxygen tank, inhalers, insulin injections, and a stack of medicines. He is a prisoner in the US, imprisoned before, some years into a 30 year sentence, unlikely to be paroled. The average unit cost in a US maximum security prison is $33,000 a year. If the man lives say another 8 years, that will cost the US taxpayer over $US 250,000, plus his treatments. Suppose he wants to die, has formally stated this wish, but does not have the resources to kill himself. By what right is his request denied? And then the tough question. Suppose he does not want to die. Why keep him alive? More in my next column.

Cannon G. Birth, life, death. Human life is not sacred
*What do you think? [Column]. World Nutrition January 2014, **5**, 1, 70-80*

Econometrics
Strange hanging fruit

Access November 2012 As I see it on Copenhagen Consensus here
Access October-December 2013 What do you think? on econometricians here



The 2012 Copenhagen consensualists who have set world health agenda: Vernon Smith, Robert Mundell, Thomas Schelling, Finn Kydland, Nancy Stokey, all monetarist economists from the US

Everybody, including Francis I, knows that the prevailing global economic system is broken. The Pope says, in his Apostolic Exhortation issued late last November: 'Some people continue to defend trickle-down theories which assume that economic growth, encouraged by a free market, will inevitably succeed in bringing about greater

justice and inclusiveness in the world. This opinion, which has never been confirmed by the facts, expresses a crude and naïve trust in the goodness of those wielding economic power and in the sacralized workings of the prevailing economic system. Meanwhile, the excluded are still waiting' (1).

So why have the institutions that have created, developed and upheld this system not changed? This question has been asked by readers and colleagues since *my December column* on the folly of econometrics (2,3). It is all the more apt given that there are a lot of active eminent and influential economists such as Amartya Sen, Daniel Kahneman and Paul Krugman who have never worshipped at the shrine of monetarism, and others like Joseph Stiglitz and Jeffrey Sachs who have recanted. Those mentioned here, other than Jeffrey Sachs, are Nobel prizewinners.

Copenhagen numbers

Here are some of the reasons. My example relates directly to public health nutrition. This is 'The Copenhagen Consensus' (4,5), whose judgements on world affairs including public health policies and actions, some concerned with nutrition, are widely regarded as definitive. Its process is less well known.

Please see the strip of pictures above. These are the economists assembled in 2012 by the self-styled 'intellectual entrepreneur' Bjørn Lomberg, the Consensus mastermind, an adjunct professor at the Copenhagen Business School, to identify as he put it, 'The smartest ways to save the world' (6). They all work in the US. From left to right, they are four Nobel prizewinners: Vernon Smith, Robert Mundell, Thomas Schelling and Finn Kydland, with an average age 80, and Nancy Stokey of the University of Chicago. The idea is to come up with 'the best researched, most rational and promising independent answers to the great issues that confront us' (4,5).

More specifically, the task was how to spend aid money most cost-effectively in the pre-selected areas of armed conflict, biodiversity, chronic disease, climate change, education, hunger and malnutrition, infectious disease, natural disasters, population growth, and water and sanitation (5). The panel's top 16 priority picks for diseases included hepatitis B immunisation (ranked #9), acute heart attack low-cost drugs (#10), and a salt reduction campaign (#11), all together allocated an annual budget over a four-year period of $US 1.32 billion.

Why these choices? In his *As I see it* column Philip James has commented: 'In the area of chronic non-communicable diseases, the 2012 panel has merely made proposals for medicine and surgery... and information and education ... There seemed to be no thinking about the social determinants of health and disease, or of issues of equity and sustainability' (7). Quite. The reason is obvious. The expert panel fundamentally were in agreement before they sat down together. They are all

monetarists. They share the ideology that enriches bankers, and that immiserates populations that are already impoverished. They think about money, and thus identification of 'low-hanging fruit' that will give the 'biggest bang for the buck' and result in 'quick-win-win situations'.

The idea that some solutions to world public health and other crises require a whole new orientation of political and economic policies and actions would not cross their minds. The idea that other solutions will involve very large sums of money in debt cancellation and pro-people reconstruction of public services, or else are not material and need little or no money, would not occur to them. Yet Copenhagen Consensus documents are widely cited as the most rational solutions to current world crises This story illustrates why the institutions and the people whose ideology is that money is the measure of development, progress and even fulfilment, are still in charge. Money means power. The US presidential candidate who is elected is the one with most campaign funds. The money mostly comes from corporations. The 2012 US election cost around $US 7 billion, twice that in dollar equivalents of 2008 Obama-McCain, which was twice that of 2004 Bush-Kerry, which was twice that of 2000 Bush-Gore (8). The 2000-2004 and 2008-2012 winners are seen above.

US politicians depend on corporate funding, and there is no such thing as a free donation. As part of this process, these days the 'masters of the universe' include monetarist economists devoted to the privatisation of public goods and the unleashing of casino capitalism, and thus the massive expansion of transnational corporations. Some of these members of the mostly US-centred 'economic power elite' are very powerful, and some (not those mentioned so above, as far as I know) are by normal standards extremely wealthy.

Money swears



The winning US presidential candidates in front (2008 and 2012) and behind (2000 and 2004) board Air Force One for a convivial journey back to the USA after Nelson Mandela's ceremony

Box 1

The US economic power elite. Larry Summers

This is an edited extract from Wikipedia 'Lawrence Henry 'Larry' Summers became a professor of economics at Harvard in 1983. He left Harvard in 1991, working as the Chief Economist at the World Bank from 1991 to 1993. In 1993 he was appointed undersecretary for international affairs of the United States department of the Treasury under the Clinton administration. In 1995 he became secretary of the treasury, with Cabinet rank. While working for the Clinton administration Summers played a leading role in the American response to the 1994 economic crisis in Mexico, the 1997 Asian financial crisis, and the Russian financial crisis. He was also influential in the American-advised privatization of the economies of the Post-Soviet states, and in the deregulation of the US financial system.

Following the end of Clinton's term, he served as the president of Harvard from 2001 to 2006. After his departure from Harvard, he made millions as a managing partner at the hedge fund DE Shaw, and speeches for major financial institutions, including Goldman Sachs, JP Morgan Chase, Citigroup, Merrill Lynch and Lehman Brothers. He rejoined public service during the Obama administration, serving as the director of the White House US national economic council for President Obama from January 2009 until November 2010, and was a key economic decision-maker in the administration's response to the Great Recession. After departure from the NEC he has worked in the private sector.

An example is Lawrence (Larry) Summers. Charles Ferguson, Oscar winner for his documentary film *Inside Job,* said as follows on publication in 2012 of his book *Predator Nation* (9). 'Larry Summers, first as an academic and then as a senior government official – by this point, he's held almost every senior policy position in economics – argued strongly for and participated in a very serious way in the deregulation of the American financial services industry. After he left the Clinton administration, where he eventually became secretary of the Treasury, he became president of Harvard, and made large numbers of speeches to financial organizations for very high rates of pay. Also, he began consulting for hedge funds'. (See Box 1).

Charles Ferguson continues: 'After he was forced out as president of Harvard, he increased his consulting activities, earning $5 million a year for one day a week of work at a hedge fund called DE Shaw, and making over a million dollars a year giving speeches to financial organizations. And at the same time, he continued to participate in policy debates'.

'In 2005, he was president at the Jackson Hole conference, which is the most important annual conference of central bankers in the world. And at that conference, Raghuram Rajan, then the chief economist of the International Monetary Fund, delivered a paper in which he warned about the growth of risk in the financial services industry and the potential for a catastrophic economic meltdown as a result of increased risk-taking in finance. And Summers, at the end of Rajan's presentation, stood up and very, very brutally criticized him and dismissed all of his concerns'.

Econometricism is a disaster



Cardinal Bergoglio (centre) enjoys some maté in a slum distinct of Buenos Aires, Argentina, soon before he was elected as Pope Francis I (left) At the end of 2013 he was Time Person of the Year

Back to Francis I, the first Pope ever from the global South. He says: 'The current financial crisis…originated in a profound human crisis. We have created new idols. The worship of the ancient golden calf has returned in a new and ruthless guise in the idolatry of money and the dictatorship of an impersonal economy lacking a truly human purpose… Man is reduced to one of his needs alone: consumption... Ideologies that defend the absolute autonomy of the marketplace and financial speculation… reject the right of states, charged with vigilance for the common good, to exercise any form of control. A new tyranny is thus born, invisible and often virtual, which unilaterally and relentlessly imposes its own laws and rules... The thirst for power and possessions knows no limits. In this system, which tends to devour everything which stands in the way of increased profits, whatever is fragile, like the environment, is defenseless before the interests of a deified market' (1).

Econometrics, manifest and rampant as monetarism, is a catastrophe of our time. It has made monsters: governments, institutions and people whose power or glory depends on possession of grotesque amounts of money, or on obeisance amounting to a kind of worship of the materially rich and famous. This is a sickness that affects most of us, in the form of consumerism. This is why we all are still in a mess. The solution starts with ourselves, including as householders, parents and citizens.

References

1 Pope Francis I. *Evangelii Gaudium*. Rome: Vatican Press, 24 November 2013. http://www.vatican.va/holy_father/francesco/ apost_ exhortations/documents /papa-francesco_esortazione-ap_20131124_evangelii-gaudium_en.html

2 Cannon G. What they believe: 2: Robert Skidelsky. Ideas come first. *What do you think?* column. *World Nutrition*, October-December 2013, **4,** 8, 652-670. *Access pdf here*

3 Chakrabortty A. Mainstream economics is in denial: the world has changed. *The Guardian*, 28 October 2013. *Access pdf here*

4 http://www.copenhagenconsensus.com/

5 The Copenhagen Consensus of 2012. .http://www.copenhagenconsensus . com/Projects/CC12/Outcome.aspx)

6 Lomberg B. The smartest ways to save the world. *Project Syndicate,* 16 May 2012. http://www.project-syndicate.org/commentary/the-smartest-ways-to-save- the-world. *Access pdf here*

7 James WPT. Obesity: The UK 'responsibility deal' and other items. *As I see it* column, November 2012. Website of the World Public Health Nutrition Association. Obtainable from www.wphna.org. *Access pdf here.*

8 Gilson D. The crazy cost of becoming President, from Lincoln to Obama. *Mother Jones*, 20 February 2012.

9 Goodman A, González J. *Inside Job* director Charles Ferguson: Wall Street has turned the US into a 'predatory nation'. *Democracy Now,* 29 May 2012. *Access pdf here.*

Cannon G. Econometrics. Strange hanging fruit.
*What do you think? [Column]. World Nutrition January 2014, **5**, 1, 80-85*

Status

Competing interests: As I write, perhaps too much enthusiasm for Brazil. For spiral discussions, thanks as ever to Claus Leitzmann. On Ross Hume Hall, many thanks to Gyorgy Scrinis, whose 2013 book *Nutritionism* (Columbia University Press) prompted me to read *Food for Nought* again, nourished by e-discussions with Gyorgy. On sugared words, my original interest goes back a long time, to *Sweet Nothing*s, compiled by Aubrey Sheiham, Helena Sheiham and Alison Quick, requested by the then Health Education Council but held back after representations from the sugar industry. On the real value and meaning of life and death my thanks go to many humans and animals in Brazil, and my thoughts remain with my mother, my second wife Caroline, and my eldest son Ben, who all died young. On econometrics, many thanks to Barry Popkin. Please cite as: *Cannon G.* What they believe (3). Ross Hume Hall. Technology as servant, and other stories. What do you think? [Column] *World Nutrition* January 2014, **5**, 1, 69-85. Obtainable at www.wphna.org.

All contributions to *World Nutrition* are the responsibility of their authors. They should not be taken to be the view or policy of the World Public Health Nutrition Association (the Association) or of any of its affiliated or associated bodies, unless this is explicitly stated.

How to respond

Please address letters for publication to wn.letters@gmail.com. Letters should usually respond to or comment on contributions to *World Nutrition*. More general letters will also be considered. Usual length for main text of letters is between 200 and 850 words. Any references should usually be limited to up to 10. Letters are edited for length and style, may also be developed, and once edited are sent to the author for approval.