WN *Columns*

World Nutrition **Volume 5, Number 10, October 2014**

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

What do you think?

Geoffrey Cannon



The spiral form shown in stained glass, a fractal, the whirlpool nebula, a nautilus shell, and a cactus. In art, science, space and nature, the spiral expresses the unfolding and development of time and life

Oxford, London, Rio, Juiz de Fora. My good and wise friend Colin Tudge, who I visited in Wolvercote near Oxford as I began this column, detests and despises the view that humans are inherently all out for themselves, and that evolution proceeds by way of aggression. He points out that Richard Dawkins and all the other 'ultra-Darwinists' rationalise abominable inequity and the corporate greed that is wrecking the planet, by what they claim is inevitable ruthless competition in which the 'fittest' survive and grow ever more powerful and predatory. He proves (to my satisfaction, anyway) that in general, nature is not competitive but co-operative, a nice example being the commensal microbes that live inside and all over us and protect us.

My hero Tony McMichael (page 886) has a similarly sage view. With Colin, he also believes that we humans must hold fast to the idea that we are just one part of nature, and that if we see our species as supreme, to the point of continuing to ravage other species and the natural world, we are lost. Tony died a few days before this issue went on-line, but lives on in the minds and hearts of those he influenced.

My take on margarine has always been that anything that looks, smells and tastes bad, must be bad. But this month (page 891) I am positive, and propose as a general rule that any dish or meal that looks good, is good. Salads are my example. You are invited to give your own examples – or refutations. Finally (page 894) I continue the theme of looking good. The spirals on this and the next page, and the image of the Four Horsemen of the Apocalypse on this month's cover, are examples of *WN* using pictures to express and amplify, and not only to illustrate, the ideas and themes of our contributions. Text, I suggest, is often or usually not enough.

Box 1

We have been warned



The vortices of great storms hitting the US, the UK, Brazil. If their frequency and severity is caused by change in climate, as now generally agreed, they will become more devastating

Climate change and its impact on world food systems and world health is the main theme of this issue of *WN*. Next month sees the second UN International Conference on Nutrition, also featured in this issue. Tony McMichael, the leading authority on the impact of climate on the health and well-being of the human species, the living and physical world, and the biosphere, who died last month, has plenty to say about the impact humans are now having on the planet. Here is an extract from his paper on globalization, climate change and human health, published in *The New England Journal of Medicine* last year:

> The global scale, interconnectedness, and economic intensity of contemporary human activity are historically unprecedented, as are many of the consequent environmental and social changes. These global changes... constitute a syndrome.... that reflects the interrelated pressures, stresses, and tensions arising from an overly large world population, the pervasive and increasingly systemic environmental impact of many economic activities, urbanization, the spread of consumerism, and the widening gap between rich and poor both within and between countries....
>
> Exponential increases in demographic, economic, commercial, and environmental indexes have been labeled the Great Acceleration... The current geologic epoch is being called the Anthropocene (successor to the Holocene epoch), in recognition of the global force that *Homo sapiens* has become, pushing or distorting Earth's great natural global systems beyond boundaries considered to be safe for continued human social and biologic well-being. The loss of biodiversity, the greatly amplified global circulation of bioactive nitrogen compounds, and human-induced climate change have already reached levels that are apparently unsafe.

He also has plenty to say about the incoherent, inadequate and ignorant response of national governments and thus the UN system to the systematically linked crises caused by human overuse and abuse of the planet:

> Future global health goals must be better integrated with the fundamental influences of poverty, inequity, illiteracy, climate change, land-use patterns, and food insecurity on health... The Millennium Development Goals are to be replaced by Sustainable Development Goals in 2016, reflecting the principle... that concern for humans must be at the centre of sustainable development. Nevertheless, concern for human health is not yet near that centre. This reflects the continuing misperception of what health means and the dominance of a narrow, clinically based view that seemingly does not take into account the fundamental need, in improving population health, to address the poor fit between environmental and socio-cultural conditions and basic human biologic and psychological needs.

We have been warned.

Food and nutrition, health and well-being

What they believe: 11. Tony McMichael Prophesy

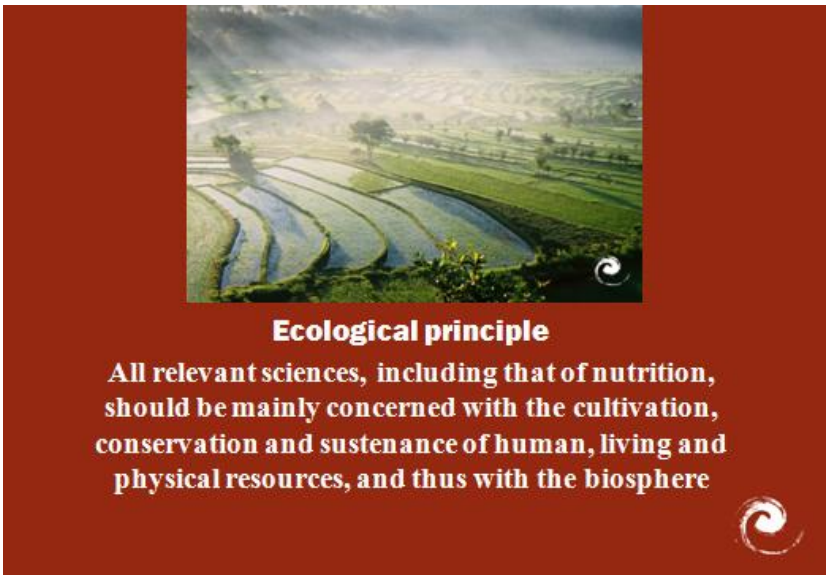


Tony McMichael, who died in September, is the master of 'the big picture' – for him, the relationship between the human species, the environment, and the biosphere. He is the leading scholar on climate and human societies. He is the penetrating prophet of our future times. Pictures above show him at the 2005 Giessen workshop which identified nutrition as an environmental science. Below are his books, one of his many dazzling slides, and a girl demonstrating in his home city of Adelaide in September.

In London in my cycling days, on my way down Tottenham Court Road to Torrington Place, I saw Tony with his elegant fifteen-speed racer on the corner of Store Street This is close by the London School of Hygiene and Tropical Medicine, where he was professor of epidemiology. He said he had been ski-ing, and needed to get the runs in, because he had only another 15 years. I assumed he meant 15 years more of ski-ing. His precision and pessimism struck me, and I blurted that he would be ski-ing in his 80s. He was in his mid-50s then, and still running marathons way under 3 hours. But he was right, as usual, and I was wrong, as happens, because that day was not much more than 15 years ago, and Tony died this September – this month, as I write.

Meeting Tony

Meetings with Tony in a bigger sense were memorable, too. Starting in 1993 he was a member of the World Cancer Research Fund panel whose report *Food, Nutrition and the Prevention of Cancer: a Global Perspective* was published in late 1997. I was director for WCRF of the project. One crucial issue identified by panel chair John Potter, was evidence. What counted as good evidence? Some panel members felt that only statistically high-powered intervention trials should carry weight. Tony, who a few years before had been chair of the scientific council of the WHO International Agency for Research on Cancer, was having none of this.



The 2005 New Nutrition Science workshop meeting at Giessen generated a series of carefully crafted principles, all guided by Tony's combination of vast ranging and meticulous thinking

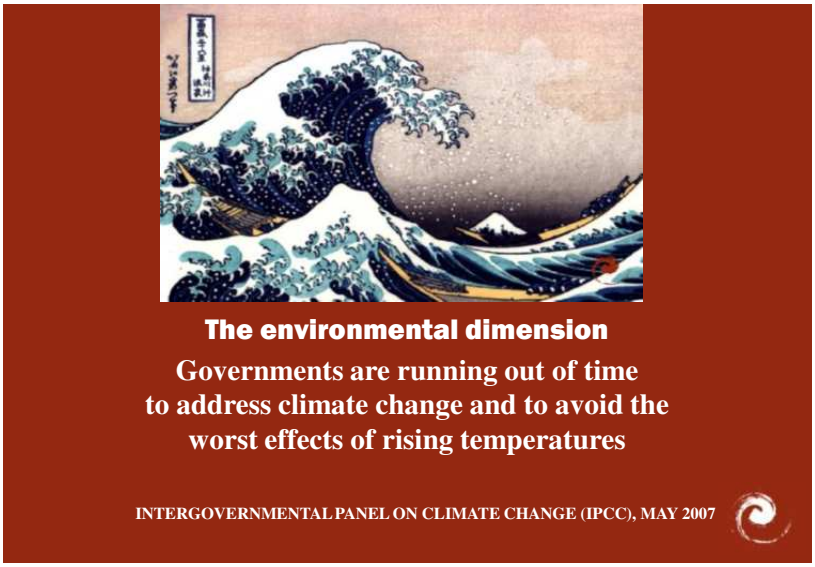
He gave us all a master class. In a quiet voice, paragraph-perfect, he set out why no form of evidence can be predominant, why all types of study have problems, and why simple observations are essential. He had our full attention. After he spoke there was no discussion. The panel and successive drafts of the report simply accepted his approach.

Twenty years later I can readily remember in detail what he said. As indicated in box 1 below, the implications are profound. Number-crunching has its place, as a servant. Nothing is absolutely true. Intelligence is essential. Ideas come first. Decisions and actions in the public interest depend on circumstances, and must be guided by wise judgements. The task is to decide which general theory is best supported by relevant evidence and are most likely to be valuable.

Box 1

Tony on science

The widely-held view of science as a set of specialised, highly technical methods for revealing 'the truth' about the natural world is a major obstacle to harnessing science to the study of complex biogeochemical systems... Modern reductionist science, now entrenched in the heartland of Western culture, makes it harder for us to imagine with humility and awe how the human species may be an interdependent part of Nature... Assessing the impacts of ecological disruption upon human health will not be tidy science. The task ranges well beyond the classical and secure scientific paradigm of hypothesis formulation, data collection and data analysis... Classical rigour is appropriate enough if you are carrying out research to find out, all in good time, how the world works normally. Scientists have been doing that for hundreds of years... But when the research question is more urgent, asking whether the world is going to stop working normally, and what the repercussions may be, then step-by-step empirical hypothesis-testing rigour may be an unaffordable luxury (1).



The 2005 New Nutrition Science workshop at Giessen, in its thinking on the environmental dimension, put biology in changing context, looked to an unknown future, and faced issues of quality

The environmental dimension

My next big meeting with Tony was at our three-day workshop at Giessen in April 2005. Its purpose was to define nutrition science to make it fit to face this century, and to identify its dimensions and domains, together with governing principles. Tim Lang, Colin Tudge and Mark Wahlqvist were participants, but even so, Tony was crucial. He got stuck in, drafted and clarified text, revelled in the project's spiral motif, and after hours played the piano in the Schloss where we were staying. On day 1, most participants allowed that nutrition is also a social science, but balked at the environmental dimension. So on day 2, Tony gave another master class, this time getting impatient with one hold-out colleague. As before, Tony's deep scholarship, quiet rhetoric, and care for the human species within the biosphere, were convincing, and we all stayed persuaded. It is now normal to see the social, economic, political and environmental as well as the biological and behavioural dimensions of nutrition. That big picture, with its environmental aspect, is above all Tony's achievement.

Box 2

Tony on the future

We cannot continue to grow in number and appetite, and to commandeer an increasing proportion of food energy, without damaging the ecosphere... This then is the dilemma for the human species as we complete our tenth millennium since the advent of agrarian living. The twenty-first century will pose a mighty challenge. Demographic stresses due to ageing populations, social stresses in large cities, ethnic fragmentation as nation-states falter, and conflicts over society, may all increase... A widening rich-poor divide would create the conditions in which acts of desperation and terrorism increase – the conditions in which modern civilisation could begin to unravel. Hopefully... altruism by the world's rich, to alleviate poverty and avert environmental crises, would be in their long-term interests (2).



This is the dawning of the age of quality

We are moving out of the era in which human activity has been mainly concerned with exploitation, production and consumption, into a new period in which the main human concerns need to be and are with preservation, conservation and sustenance.

Always seeing the big picture, and always himself inspired by ideas, Tony identifies our time as a new era, the Anthropocene, which requires everybody to develop whole new ways of being in the world

'In fond appreciation of a friendship spanning two decades and three continents' Tony inscribed in one of his books. Our relationship tested me. Like others, I always felt nervous about what Tony would think about any initiative I took. His standards were very high. He strengthened me, too.

You can do it

When I was floundering with the WCRF cancer report, helplessly looking for some panel member to draft some tough stuff, Tony told me 'You do it. You write it'; and I felt his serious purpose – I could, and I must. So I did. Others say too that the sense of Tony supporting and approving of what they did, acted on them like an elixir. As with a handful of other people in my life who are now dead, Tony shapes my consciousness and conscience. This is why I write about him in the present tense, because although he is dead, he lives on those he inspired, and there are a lot of us.

Box 3

Tony on human prospects

The one underlying problem is the entrenched inequality between rich and poor countries, which predominately reflects recent imperial history, power relationships, and the global dominance of Western industrial technology and economic values. The two central manifestations of this inequality are rapid, poverty-related population growth and land degradation in poor countries, and excessive consumption of energy and materials, with high production of wastes, in rich countries. The three possible adverse outcomes of these manifestations are exhausting various non-renewable materials, toxic contamination of localised environments, and impairment of the stability and productivity of the biosphere's natural systems... By the time the health consequences of ecosystem disruption are clearly evident in human populations it may be too late to reverse or repair the damage (1).

The ability to have ideas, is above all the human quality. Tony's thinking rightly puts ideas first. A challenging panel discussion as the WCRF cancer report progressed was between one panel member who assumed that a recommendation to consume lots of cereal foods made evolutionary sense, while another proposed that 12,000 years of peasant agriculture could be too short a time for organisms to adapt, and that a gatherer-hunter diet with plenty of leaves and fruits may well suit humans best. It was of course Tony who took the long view. He was not attached to this advocacy, and the report does not recommend a Palaeolithic diet, although we made sure that attentive readers could infer that starchy foods are not the only staple option.

Tony the seer

Tony is a prophet. His spirit is that of a dreamer of dreams and a seer of visions. He does not hurl down curses on a society on the road to ruin. His style is courteous. But he is not one of those writers about the future whose books – perhaps prompted by the publisher – have a final chapter designed to cheer up the reader with tips on recycling and downsizing, like the final reel of an ominous movie in which the financiers insist on a happy ending. He makes clear that mere tweaking, adjustments within the current prevailing paradigm of 'progress', 'development' and 'growth', as now constantly being proposed in what are now a Himalayan range of official global Summits, will not work. His final choice of books to read now, published in WN a couple of months ago, is sombre.

If Tony had been watching or participating in the great global manifestations on climate in September, he would have been pleased, but surely not gratified, at what he would have seen only as first stirrings. Here is what he says, in his outline for the book he was working on at the time of his death.

> If we fail to respond adequately, new and great geophysical and ecological forces beyond human control may soon impose an end (catastrophic or managed) to the growth ethic. Historically extreme climate change will force a change in world-views, priorities and ways of living if the collapse of yet another civilisation, this time global, is to be avoided.
>
> In due course future historians, whoever they might be, will see the Twenty-First Century Climate Event as a major crisis point in the ongoing odyssey of human affairs. The chance still exists to harness the remarkable cerebral power of *Homo sapiens* in order to collectively, creatively and constructively influence the outcome of this historical event, to achieve the Sustainability Transition. But that chance is shrinking by the decade.

Box 4

Books by Tony McMichael

(1). *Planetary Overload. Global Environmental Change and the Health of the Human Species, 1993.* (2). *Human Frontiers, Environments and Disease. Past Patterns, Uncertain Futures, 2001. Climate Change and Human Health. Risks and Responses (co-author) 2003. When Climates Change. Famines, Fevers, and Fates of Populations. In preparation*

Dishes, meals

Healthy meals are beautiful

Last month several contributors to the *WN Development* commentary linked with the Oxford conference on food systems, stated or suggested that it is easy to identify a good food system, by the quality and the beauty of the landscape it creates and nurtures. This idea is catching on. It is developed in this month's lovely commentary by Stefanie Vezzosi and colleagues on the originally ancient Tuscan food system, and the corresponding countryside.

Here I develop the idea. Does healthy food, in the form of freshly prepared dishes and meals, look good? Is it beautiful? Not always, for sure, but I think the answer is usually or even typically yes, it does and is. Take the dishes and meals our housekeeper Dona Ana prepares for us and also for the men who are now working on our house. Box 1 digests some of what I wrote six months ago.

Box 1

Dona Ana and the assassins



Our housekeeper Ana Maria de Nascimento makes fresh meals for our builders and for us. Here are two of her classic Brazilian masterpieces, all based on simple economical fresh food

Here I show you what everyday Brazilian freshly prepared dishes and meals are all about. Ana, our housekeeper, above at work, has never looked at a cookbook. For four years she prepared meals for her bandits and assassins (*'muito perigoso'* – 'very dangerous' – as she describes them) imprisoned in the nearby town of Lima Duarte. Her main meals for them included meat with manioc grits and potatoes or pasta, with fresh vegetables, salads, and some fruits. The villains ate well.

Here above are two of her main midday dishes for us and for the builders now in our house. Left is a classic from our state of Minas Gerais: *tutu*: mashed beans, with hard-boiled eggs, sausage, and greens. (Too eggy, says a purist colleague). Right is Ana's own dish of *gilot,* which is rather similar to okra, also cheap in the shops, with greens and pasta.

Dona Ana prepares and cooks simple delicious economical fresh dishes and meals just like those recommended in the new national Brazilian food guide, about to be published, as I have told her, so that she can be proud. She proves that the *Guia* is not an expert theory imposed on populations, as other guidelines are. Ana makes the *Guia* real, every day at home.

Good food looks good

The reason I grabbed my camera to take the pictures in Box 1 above, of a lunch Ana was making for the workers and us, was not to illustrate everyday traditional cooking, but simply because the cooked food looked so good. Ana would not I think see herself as artistic. With fresh food though, I sense that it is a natural habit for her to make beautiful meals, if only because she knows where most of the foods used to make them come from, and respects this.

The contents of her cooking pots are like the landscapes created by generations of farmers whose simple implements and machines make it natural for them to nurture the shape of their land and what grows best in its soil, all the time replenishing its fertility. This is not surprising. Ana comes from a family of peasant farmers without the money or the inclination to hack up the land with machines and who, instead, have made the best of what they had and have, using almost all parts of the plants and animals with very little waste.

With many traditional dishes from all over the world, this is a very good best indeed, because of the care that has gone into growing, harvesting, storing, preparing and cooking – and eating, usually round a table in company. Left to themselves and using their eyes and hands – and sense of touch and taste too – I suggest that people naturally understand and appreciate what looks good and is good – and with food, good also in the sense of healthy. That's my proposal.

Note for cynics

In proposing that good (=healthy) food looks good (=beautiful), perhaps I am also suggesting that bad food looks bad. After all, more often than not it is the pictures on the package, and not what is inside, that looks attractive. Let's get real about what cheeseburgers and fries really look like when served (left). Furthermore, sometimes even the images on packages look disgusting – at least, to this eye. Do you warm to the depiction of Nescau® 'radical cereal' as shown on the box below (right), being sloshed with milk? This extruded kiddie-chow looks like goat droppings to me.



So what do bad (unhealthy) food products look like? Left is a candid camera shot of the US favourite cheeseburger and fries. Right is a best-selling sweetened 'radical cereal' aimed at children

The good-looking food guide



Ana's salad (above, left). A supper Raquel made for Gabriel (right). A lunch I made for myself (below, left). A lunch Jean James made for me (right). Delicious, healthy, naturally good-looking

You can join in

Here is my idea. Let's see what foods look like, that we choose and prepare in the form of dishes. Let's take salads as an example. What interests me about the four salads above, all made spontaneously, is that they look good, and also express the nature of their makers. Above left is a salad as prepared by Ana. She should be a restaurateur. The bed of leaves and stalks from our garden is covered with evenly cut and chopped tomatoes, onions, peppers, garlic and nuts, plus olive oil and sea salt.

At right is a supper salad made by my wife Raquel for our 10-year old son Gabriel. It includes playful rows of carrot sticks, beetroot slices and cauliflower sprigs, lettuce (which Gabriel doesn't like much), with energy-packed whole rice and macaroni, sweet corn, nuts and raisins. Below left is a salad I made for me the next day, with salsa from the garden, tomatoes, pineapple, and garlic, ginger, little 'beak' peppers, olive oil and a few crystals of sea salt. Left to myself, I like exuberant taste. It shows – I like to think – that I am a bit of a Jackson Pollock when it comes to flinging a salad together. Right is a lunch Jean James made for me when I visited Philip and Jean James in London in September, with temperate foods, colourful, satisfying, replete, expressing her own generous and thoughtful nature.

You, dear reader, are invited to join in. Let's collect and display pictures of salad dishes we have seen or better, prepared ourselves. Your report should also include an account of what the dish or meals smelled and tasted like, and we also can do a rough conventional nutrition analysis. Join me please.

Icons, emblems, images, pictures
Food for thought



WN symbols. The New Nutrition, The Food System (the two images), Big Food Watch, Sugar, Climate, Farming. Development, Source, Blog Watch, Hot Stuff, Balance. All are food for thought

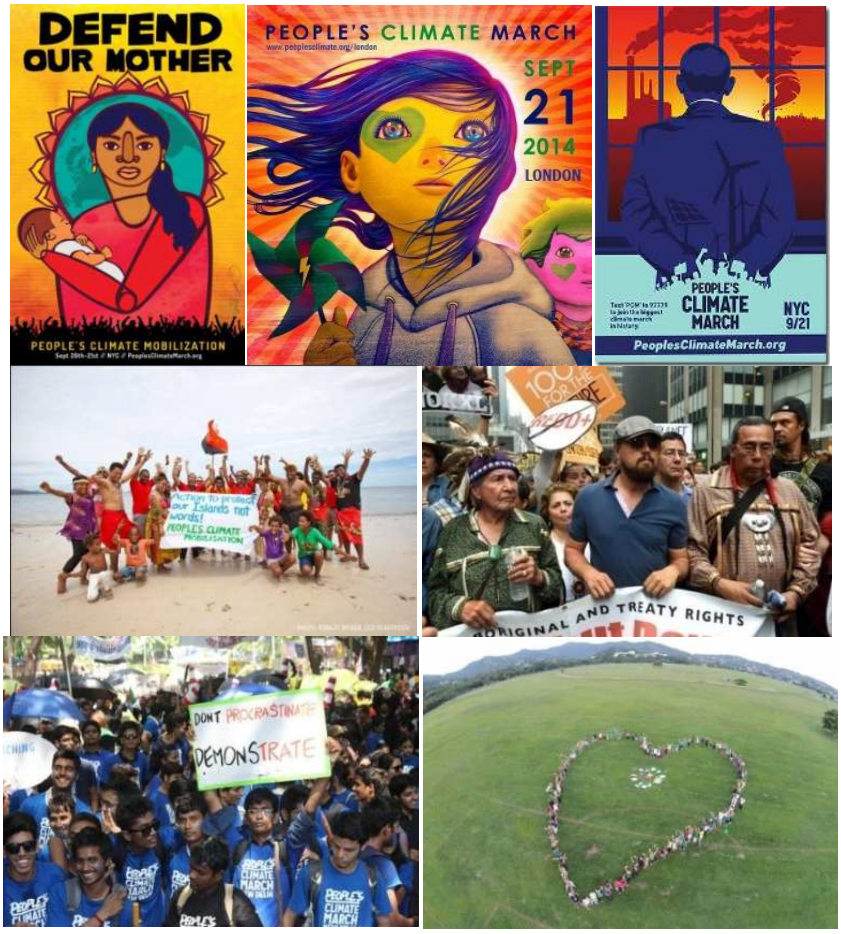
'Sometimes the pictures seem to be more important than the text', it is occasionally said of *WN*. True. Words – and charts, graphs, tables and the like – are usually the right way to convey facts. Pictures – including symbols, graphics, images – are often the right way to convey ideas. The comment on *WN* is, I feel, really saying that serious journals should be mainly concerned with evidence and information and should stay away from opinion and attitude.

Some of the symbols shown above, now used by *WN* to project many of the areas of our contributions, almost as brand images, do no more than illustrate a concept. The most powerful and successful pictures project a point of view. A striking example is the icon we use for our coverage of *Sugar*, which conveys allure. Another example is the image for *Farming*, which projects the need for hands-on nurture. This issue of WN introduces *Balance*, whose image, including the sun and moon, yin and yang, evokes health and well-being as mental, emotional and spiritual as well as physical.

Coming on strong

The cover of this issue of *WN* on climate, of the Four Horsemen of the Apocalypse, is faithful to the views of this month's chief contributor Tony McMichael. But it is disturbing. It evokes the real possibility that change in global climate could cause collapse of civilisation. Words alone do not adequately convey this dreadful threat, whereas *WN's* constant use of the icon of the vortex created by vast storms as the emblem for *Climate*, may make readers feel that what has been created by humans may well right now be passing outside human control.

In these matters timing and phrasing are vital. A cover on climate using an image from the Revelation of St John the Divine would if published 20 years ago have been widely seen as gratuitously alarmist. Some readers now may feel that it goes too far. Well, in that case, the WN *Feedback* section will welcome well-reasoned letters from independent sources, explaining why we should not be too alarmed



Graphic images made for the climate marches, and photographs: Port Moresby, Papua New Guinea; Leonardo diCaprio with native Americans in New York City; New Delhi; Trinidad and Tobago

Climate made manifest

In this issue, *WN* publishes lots of pictures of the climate marches and demonstrations all over the world. Here are more. They tell a story that words by themselves could not. The point of demonstrations is to be there and to be seen and recorded. The style of what is shown is crucial – the method is the message. What can be seen above is that the marches and demonstrations were superbly organised and co-ordinated. The graphic designs are top professional quality. The one of Barack Obama, recognised by the ears, as a spectator of industrial pollution, is clever.

Also, the manifestations were stylish, attractive, positive and confident. The events were not projected or portrayed as rabble being roused. One reason is that UN secretary-general Ban Ki-moon made sure that he was seen with the marchers in New York. Remarkably, the images in newspapers and on television took their cue from the organisers, including the awesome on-line and social media Avaaz movement. Supported by words repeating that the greatest impact of climate change will be and is on food systems and world health, these pictures tell all concerned with public health and nutrition that climate is a political issue that affects their work and lives, every day.



Four pictures from this issue of WN. A classic Christmas Coke ad. Ban Ki-moon on the march. Tuscan children joining in the baking of wholewheat bread. 'Food' for asylum seekers in Ireland

Here are four more pictures, now from this issue of *WN*. Above left is a 'classic' Christmas Coke ad that would not be used now, showing where Coke executives' heads have been at. Next is Ban Ki-moon on the New York City climate march, accepting a petition from Avaaz. Below left are schoolchildren in Quarrata, Tuscany, being taught how to make wholegrain bread served with their lunches. Below right illustrates the type of 'meals' that refugees from Europe, Africa and elsewhere with intact food cultures, are forced to eat in prison-style asylum centres in Ireland.

Could the point of these stories by fully made only with words? No, I think not. To protect public health it is necessary to speak and show as well as to write.

Status

Please cite as: Cannon G. What they believe #11. Tony McMichael. Prophecy, and other stories. What do you think? [*Column*] *World Nutrition*, October 2014, **5**, 10, 884-896. Obtainable at www.wphna.org. 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 unless this is explicitly stated.

How to respond

Please address letters for publication to wn.letters@gmail.com. Usual length for letters is between 300 and 1000 words. Letters are edited for length and style, may be developed, and once edited are sent to the author for approval.