WN *The issue*

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Visions of transformation
More power to the people



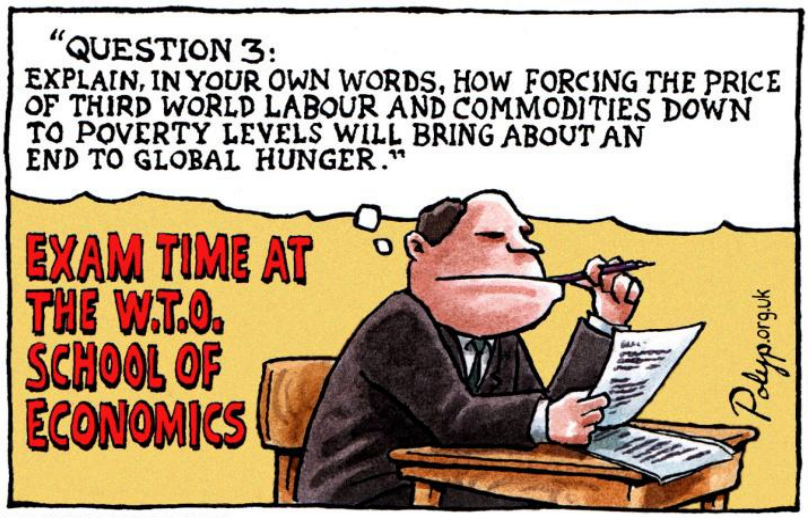
In WN this month (at top) Pope Francis, Vandana Shiva, Naomi Klein; Claudio Schuftan; David Raubenheimer, Dariush Mozaffarian, David Allison, Richard Wrangham, (then) Rachel Carmody, Nathanael Johnson; Cecilia Castillo; Ashok Bhurtyal, Dushala Adhikari; Anthony Fardet; George Kent; Geoffrey Cannon; (bottom) Jose Luis Vivero Pol; Pilar Zazueta, Leonardo Mata; Chistine Stabell Benn, Peter Aaby, Ane Fisker, Pattanee Winachagoon, Emorn Udomkesmalee

The Issue team reports: Our first editorial (page 238) is inspired by Pope Francis, Vandana Shiva, and Naomi Klein. Then (page 241) Claudio Schuftan on 'sustainable' 'development'. Much of *Update* reports the collapse of chemical nutrition, as examined by David Raubenheimer, Daruish Mozaffarian, David Allison and others, and the uprising of meals, as seen by Richard Wrangham, and (second row) Rachel Carmody, Nathanael Johnson and others. Our commentaries are by Ashok Bhurtyal and Dushala Adhikari on vitamin A supplementation (page 263); Anthony Fardet on the need for food to be whole (page 269); and George Kent on nourishing communities (page 280), and Geoffrey Cannon celebrates a new hero (page 292). *Feedback* letters (page 307) are by (bottom row) José Luis Vivero Pol, Maria del Pilar Zazueta, Leonardo Mata and George Kent and (page 313) on vitamin A by Christine Stabell Benn, Peter Aaby, Ane Fisker; Pattanee Winachagoon, Emorn Udomkesmalee; and Shamim Hayder Talukder.



***WN** Sick societies*

'Sustainable' 'development'



'MAKING THE GRADE'

The UN is committed to 'sustainable development' between 2016 and 2030 so as to end poverty and hunger. This can be done only after the current dominant system of governance is displaced

Editor's note. A number of contributions in this issue of *WN* state or imply that the current dominant global political and economic system, which has made what is now a global industrialised food system, creates inequity, poverty and misery. In his guest editorial Claudio Schuftan suggests that 'sustainable development' is a contradiction in terms, and points out that there always has been an alternative – food sovereignty.

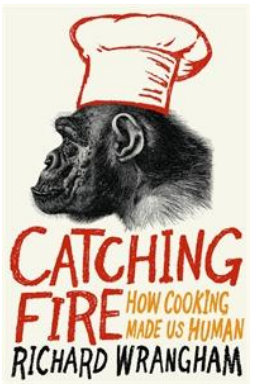
Claudio Schuftan writes: Food security requires food sovereignty. This includes the right of people to produce, sell and acquire culturally appropriate healthy food suited to local climate and terrain, produced by socially just and ecologically sensitive methods. Food sovereignty also means the right communities and citizens as well as farmers and growers to participate in decision-making on what to grow and what to distribute and sell, and to define and sustain their own food, agriculture and fisheries systems. It means that people, families and communities have control over their own lives, have a voice and influence in decisions that affect them and their homes and environments, and so act as real citizens in genuine democracies. This is all worth fighting for – and is being fought for, in city streets and countrysides in many countries the world over.

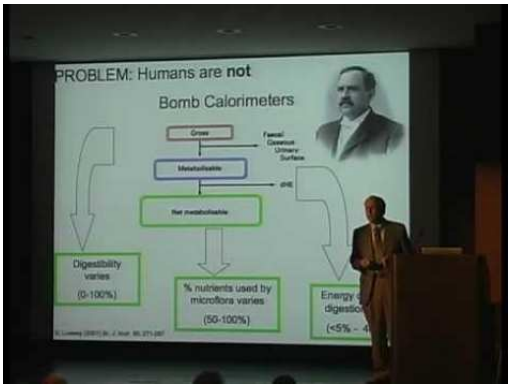
Access WN editorial here
Access Guest Editorial Claudio Schuftan on 'sustainable development' here
Access Balance George Kent on sustaining societies here
Access What do You Think? Geoffrey Cannon on Karl Polanyi here



WN *Idea. Evolution*

The origin of the human species





Cooking increases the dietary energy available from food, and greatly increases range, variety and nature of what can be eaten. Richard Wrangham says it is cooking that generated Homo sapiens

Simon Ings, author of The Eye: a Natural History, writes, from his review of Catching Fire: Just over two and a half million years ago, hominid brains swelled. Less than a million years later, they swelled again, posture and gait changed, jaws shrank, and hominids grew taller. The character of the change from *Homo habilis* to the proto-human *Homo erectus* – has never been adequately explained, and Richard Wrangham believes he has the answer from 1.8 million years ago. Cooking. This improves the caloric value of food, and widens the range of what is edible. It literally powered the evolution to humans.

Can this big idea be true? Nobody can know for sure when cooking got going, because the chances are minute that anyone will ever stumble upon an ancient half-eaten spit-roast and recognise it for what it is. (That archaeologists have found earth ovens more than 250,000 years old is startling enough).

Richard Wrangham's task, then, is to come up with compelling evidence that the invention of cooking explains the transformation to erect posture, shrunk guts, receding jawlines, and brains growing to their current, horrendously fuel-inefficient size. He succeeds. *Catching Fire* is that rare thing, an exhilarating science book.

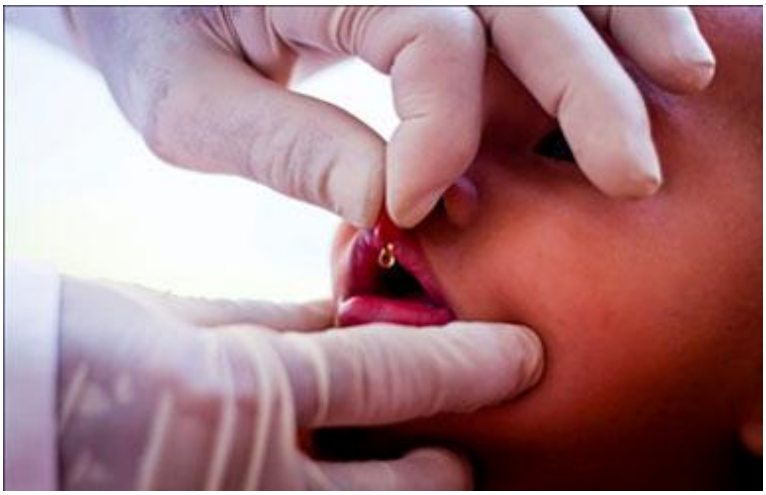
Homo erectus's novel dentition, skull shape and gut capacity are crucial. This is a hominid that chewed less and thought more. The circumstantial evidence Richard Wrangham gathers is even more compelling. His review of the anthropological literature, for instance, shows that no-one, ancient or modern, settled or nomadic, has ever survived for more than a couple of seasons on an exclusively raw diet. Humans, he says, are as adapted to cooked food as cows are to grass.

Access Idea.Richard Wrangham and Rachel Carmody on cooking makes you fat



***WN** Hot stuff*

Vitamin A: Food, not capsules





In Nepal as in many countries in the global South, potential as well as actual deficiencies are treated with micronutrients, such as vitamin A capsules. These foreign-originated interventions should be replaced by strong public policies and actions to boost local fresh foods, which are abundant in Nepal

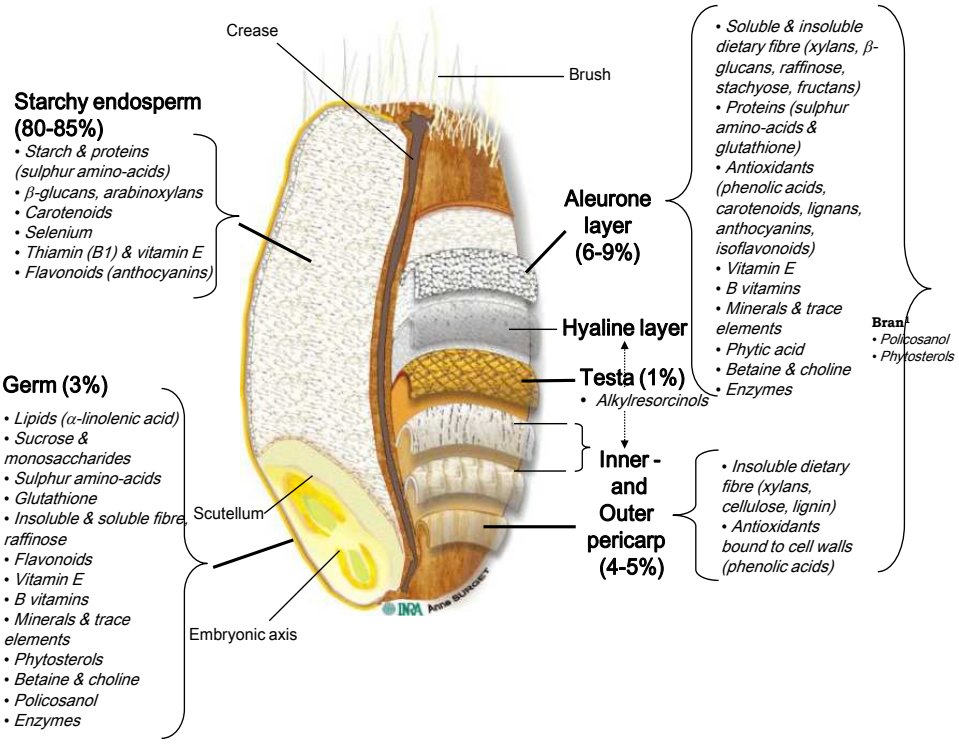
Ashok Bhurtyal and Dushala Adhikari write: In our country of Nepal the vitamin A capsule programme is distracting attention from sustainable solutions for vitamin A deficiency and for general malnutrition. The best choice, needing strong support, is healthy diets based on indigenous and local fresh foods. Nepal's exceptional biodiversity is all we need to prevent malnutrition of all forms. It is time to replace high-dose vitamin A supplementation by national and local food-based programmes, in the spirit of justice, equity, autonomy, and plain good sense.

Access Ashok Bhurtyal, Dushala Adhikari on vitamin A supplementation here
Access Feedback letters on vitamin A supplementation here



***WN** The Food System*

Make and eat food whole



In whole form, natural foods generally contain very many bioactive and potentially protective compounds – far more than accounted for in food products. The wheat berry above is one example

Anthony Fardet writes: Reductionism is the philosophy or tendency to reduce complex phenomena to their simplest components and to consider these as more fundamental. This may lead to disconnection from complex reality, which is exactly what has happened in food science and human nutrition. Reductionism has led to fractionate natural foods into smaller components – ingredients or nutrients. Ultra-processed products, nutraceuticals and nutritional supplements are the results of extreme reductionism applied to the matrix of foods.

Today, most marketed cereal- based food produts show reductionism pushed to its extreme limits. Grains are mostly milled and 'refined' to make white wheat flour. Germ and bran, the most nutrient-dense and healthy fractions, are removed, especially for animal feed and 'health food' products. White wheat flour has lost most of its bioactive compounds. Ironically, so have commercial 'wholegrain' flours, breads and other 'whole' wheat products, in whichonly a fewof the bioactive compounds contain in real whole wheat have been added back(see above).

Access The Food System. Anthony Fardet on the need for whole food here



WN *Balance*

How to nourish society





In many countries – above in India and the US – people work together to make their environments safe, beautiful, and useful. Gardeners are greening their neighbourhoods by growing food to share

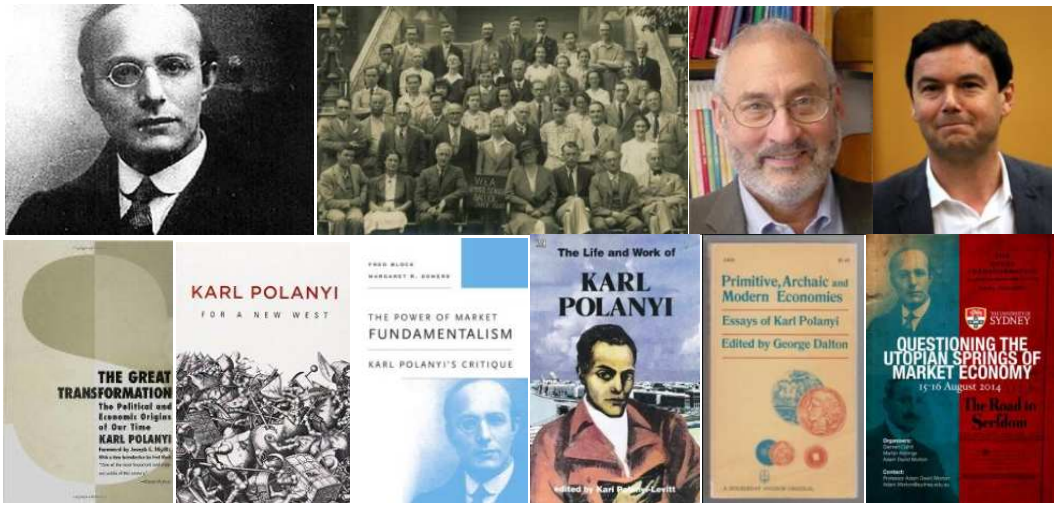
George Kent writes: There is a need for more strong communities throughout the world – strong in the sense that their people care about each other's well-being and their environment. Caring communities collectively amount to societies that nourish well-being, reduce hunger in the world, and address employment, health, the environment, and transportation, in both high and low income settings.

Caring communities produce much of their own food, and manage energy, waste disposal and many other concerns at the community level. They strive to be more sustainable, resilient, and self-reliant. In my commentary, food is an example of the nourishment all this creates, provides and sustains.

Access George Kent on nourishing communities here

What do you think? Karl Polanyi

The 'market' is a monster



The man who may now turn out to be the most influential guide to our times. Karl Polanyi when young (above left) and (next, front row at right) at a socialist meeting at Balliol College, Oxford. Joseph Stiglitz and Thomas Piketty (above right) are admirers. Below, books by and about him

Geoffrey Cannon writes: The book that 'never goes away' on the effect of unregulated capitalism on the fate of the world is not *Das Kapital*. It is *The Great Transformation*, by Karl Polanyi (1886-1964), historian of politics and economics, available in a new edition introduced by Nobe prizewinner Joseph Stiglitz. The final 60 minute programme in the *2014 tv series Capitalism* is devoted to his relevance acknowledged by economist superstar Thomas Piketty and Greek finance minister Yanis Varofakis.

Box 1

Karl Polanyi on 'the market'

To allow the market mechanism to be sole director of the fate of human beings and their natural environment... would result in the demolition of society. The alleged commodity 'labour power' cannot be shoved about indiscriminately, or left unused, without affecting also the human who happens to be the bearer of this peculiar commodity... The system would dispose of the physical, psychological, and moral entity 'man' attached to that tag.

Robbed of the protective covering of cultural institutions, human beings would perish from social exposure; they would die as the victims of acute social dislocation through voice, perversion, crime, and starvation. Nature would be reduced to its elements, neighbourhoods and landscapes defiled, rivers polluted, military safety jeopardised, power to produce food and raw materials destroyed. Market administration of purchasing power would periodically liquidate business enterprise, for shortages and surfeits of money would prove as disastrous to business as floods and droughts in primitive society.

Access What Do You Think? here