

TED Global: Brilliant babies, electric grannies and bankers behaving badly

Speakers at [TED Global](#) on Thursday waxed lyrical about the creativity of toddlers, the role of grandmothers in spreading solar power in Sierra Leone, and bankers' brains

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Alison Gopnik: Being a baby 'is like being in love in Paris after three double espressos'. Photograph: James Duncan Davidson/TED

Can babies do maths?

They can, says [Alison Gopnik](#), a developmental psychologist. Not only that, they can do really quite difficult maths: statistics, probability, Bayesian theory ... Gopnik has devised experiments showing that when it comes to designing and testing hypotheses, 18-month-old toddlers are better at it than adults.

Children, she says, are the "R&D department" of the human race. "They're the blue sky guys, and we are production and marketing." They're creative, open-minded, imaginative. Their brains are flooded with neurotransmitters that promote neuroplasticity. The closest you can come as an adult to achieving the flexible open-mindedness of a child, says Gopnik, is to fall in love, or go to a new place, while coffee can mimic the effect of those neurotransmitters.

"What's it like being a baby? It's like being in love in Paris after three double espressos."



Posted by [Carole Cadwalladr](#) Friday 15 July 2011 12.36 BST [guardian.co.uk](#)



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Paul Zak: Oxytocin promotes empathy, 'and it's empathy which makes us moral'. Photograph: James Duncan Davidson/TED

Why do bankers who get huge bonuses sometimes behave badly?

Because they can't help it, says the neuroscientist **Paul Zak**. Or at least they can help it, but the chemicals released in their brains make it more difficult for them than other people. Zak has studied the effects of oxytocin and what he calls "the **biology** of trustworthiness". Increased oxytocin in the body increases empathy. "And it's empathy which makes us moral."

Giving money away, hugging, praying can all increase oxytocin. But testosterone inhibits it. And higher levels of social status are associated with higher levels of testosterone. Hence the problem of the bankers' bonuses. What's more, some people are simply wired differently. "Five per cent of the population don't release oxytocin on stimulus. We have a technical term for them in our lab," says Zak. "We call them 'bastards'."



Bunker Roy: After a few months' training, grannies in Sierra Leone 'will know more about solar engineering than a graduate after five years'. Photograph: James Duncan Davidson/TED

Who make the best solar engineers? Men, women or grandmothers?

According to **Bunker Roy**, the founder of the **Barefoot College** in India, it's the grandmothers. "One lesson we learned," he told the **TED** audience on Thursday, "is that men are untrainable. Men are restless, they're ambitious, they're compulsively mobile and they want a certificate."

Roy's great belief is that the poor have all the skills they need to help themselves, and his organisation has had huge success in bringing education and services to the rural poor around the world. The problem



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mjrobbins: RT @TimHarford: This link will not be retweeted. Here's why: <http://goo.gl/NyuEm>
about 4 hours, 43 minutes ago

with training men, he says, is that they tend to want to leave the villages, and take their skills with them.

His solution has been to train the grandmothers. In Sierra Leone right now, 150 grandmothers are being trained as solar engineers, who will be able to go and electrify theirs and others' villages. In a few months, he says, "they will know more about solar engineering than a graduate after five years."



Alain de Botton: The problem with secularism is that it's badly organised. Photograph: James Duncan Davidson/TED

What's the most underrated virtue?

Politeness. Or so says [Alain de Botton](#). The latest subject to come under his scrutiny is religion. De Botton is proposing a "pick 'n' mix" approach to the world's religions: take the rituals, ignore the doctrine.

He proposes a strategy of "harmonious disagreement". "If somebody said that they prayed the other day, simply politely move on."

The problem with secularism, he says, is that it's badly organised. Artists, writers, thinkers, poets, psychotherapists ... they tend to work alone "and get a bit depressed". What they need is to learn the lessons of organised religion. "The Catholic church is collaborative, multinational, branded and highly disciplined ... whereas books written by lone individuals will not change anything."



Paul Bloom: We don't just respond to what we see, but also to what we think things really are. Photograph: James Duncan Davidson/TED

How do you get children to like carrots?

Tell them they're from McDonalds. [Paul Bloom](#), a psychologist from Yale who studies [the pleasures of everyday life](#), says that humans "are natural

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born essentialists". We don't just respond to what we see, but also to what we think things really are. If we think a wine is expensive we enjoy it so much more than if we think it's cheap.

The brains of people were scanned while drinking what they thought was costly wine "and the pleasure and reward centres of their brains lit up like a Christmas tree".

The good news is that if you like something, it looks better to you. "Which is why people in happy marriages think their spouses are much better looking than other people think".

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ameliiegourdon

15 July 2011 12:46PM

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I watched Paul Zak's talk, and he absolutely neglected to talk about the negative effects of oxytocin (e.g., <http://blogs.discovermagazine.com/notrocketscience/2011/01/11/no-love-for-outsiders-oxytocin-boosts-favouritism-towards-our-own-ethnic-or-cultural-group/>). Not very balanced for a science talk (even to a "wider" audience).



dirkbruere

15 July 2011 1:06PM

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I doubt my brain would be lit up by a cheap wine packaged as expensive. I've had wine that cost £700 a bottle and it did not taste significantly better than a bottle I had in France costing £10. Fortunately somebody else paid for it.



BrunoP

15 July 2011 1:31PM

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So it's all about lying and money? Big surprise. I once went to a top restaurant with my girlfriend and my putative business partner (very rich). I said before the meal it was my turn to pay, as he had previously. I went to the toilet and he ordered a bottle of wine. I had a glass and when the bill

came the wine had cost £2000, so he paid. He then married my girlfriend, but what I'm most pissed off about is that I couldn't savour a £2k bottle of wine...



tickledonion

15 July 2011 2:03PM

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@ dirkbruere

I think I tried that same £700 wine. A poncy little number with a strong hint of hype.



mrquiet

15 July 2011 4:22PM

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Oversized people waddling around Edinburgh with oversized badges.

The Farmfoods across the road from the conference centre's changed more lives for the better.

Twirls are still only £1.75 a pack of 7 bt



Almendral

15 July 2011 7:05PM

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Mrquiet what an utterly inane comment.. I cannot imagine you went to TED. I did and despite my reservations and scepticism, I was totally, enthrallingly blown away. I have watched 70 presentations, some inspirational, some baffling and yes, some even infuriating at times but all of them compelling. And in between times, I was equally impressed by many of my fellow delegates some of whom had indeed changed many people's lives for the better. Cynicism is a great anedote to action.



dirkbruere

16 July 2011 5:34AM

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@tickledonion

I think I tried that same £700 wine. A poncy little number with a strong hint of hype.

I'm not especially keen on wine, but I know crap when I drink it.

Somehow the £3.99 Chateau Tesco always disappoints.

Which is surprising because that amount of money in France will buy something quite decent.

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