Less waste

1 Why is it only "arguably" fairer to take \underline{1} into account when determining a country's contribution to global warming (18 January, p. 12)? Surely it is much more equitable than just taking the absolute figures and relating them to a country's area regardless of its number of inhabitants.

2 In my street, I produce less waste than my neighbours, who occupy a similar living space. They also use more energy. Are they "worse" polluters than I am? They happen to be families, mostly with children, whereas I am a single person living alone. Is it reasonable to expect them to consume and pollute only as much as me?

Frank Hung, London, UK

adapted from NewScientist, 2014
**Delicate delicacies**

1 SIR — The European Union is not trying to "claw back" every food name that is used for generic food stuff in the United States, and certainly not through trade negotiations ("Stressed are the cheesemakers", July 19th). But there are food names where the value to consumers derives from their traditional association with particular regions — Roquefort, Gorgonzola, and so on. Someone paying a premium price should know they are getting the genuine article.

2 The bottom line is simple: it is wrong to free ride on the reputation of the original high-quality product or to confuse consumers about its true origin.

3 And in fact a lot of American producers support the European approach to promoting speciality food and wine names. This is not about trade protectionism. On the contrary, the good protection of wine names in Europe and America has helped our trade in wine to boom. European consumers know that a Napa Valley wine is a wine of distinction and do not wish to be fooled by misleading labels. American consumers deserve nothing less with European products, be it Bayerisches Bier, Scotch whisky or Parmigiano Reggiano.

Roger Waite  
European Commission Spokesperson for Agriculture  
*Brussels*

SIR — Kraft Parmesan is to Parmigiano Reggiano as meatloaf is to Kobe beef. Those who can't tell the difference do not merit a warning.

Lee Nason  
*New Bedford, Massachusetts*

*The Economist, 2014*
Brain gain

1 The maxim that "If we don't get smarter, we'll get poorer" becomes increasingly germane as the UK depends ever more on the high-tech sector and high-skill individuals. The consequent importance of 5 can therefore not be emphasised enough.

2 In the recent past we have achieved a brain gain. But this has been jeopardised by the real-terms cuts in the past five years. The best talent — from outstanding PhD students to world-leading scientists — is highly mobile. When choosing whether to work in the UK, or in, say, the United States, Germany or Singapore, such people are influenced by comparative funding trends. If the current squeeze continues, and the funding gap with competitor nations widens, they will go elsewhere and we will lose out.

3 Even modest cuts could lead to a disproportionate loss of the top talent on whom scientific productivity and the international standing of our research universities depends. That is why it is crucial that the comprehensive spending review sends a signal that enables UK science to build on past successes, rather than jeopardise them.

adapted from The Times, 2015
Get a grip

The Biology of Desire
by Marc Lewis
PublicAffairs, 238pp

Marianne Szegedy-Maszak

1 In 1956, the American Medical Association absolved alcoholism from the charge of being a moral failing or a destructive bad habit and labelled it an official disease. Acknowledging the changes in brain structure among severe problem drinkers and eventually in other addicts, the AMA concluded that addiction paralleled other diseases such as Alzheimer's or diabetes. This meant that by the mid-1980s insurance companies were paying for treatment. It also led to the development of effective drugs to ease the symptoms of withdrawal and the rise of a highly profitable industry for addiction services. Today the National Institute on Drug Abuse reflects the standard approach, succinctly describing addiction as a "disease that affects both the brain and behaviour".

2 The disease model also an addict's claim that willpower was not enough to control the habit. How could someone with Alzheimer's be criticised for forgetting where the keys are? And how could an alcoholic who was wired for a drink be criticised for not being able to stop?

3 But, in fact, addicts can and do stop. And according to Marc Lewis in The Biology of Desire, this reveals a basic problem with the medicalisation of addiction. "People choose to stop when they have suffered more than enough," he writes. "And when circumstances lend a hand. And when the possibility of becomes as attractive ─ more attractive ─ than any other possibility, including temporary relief."

4 "I'm convinced that calling addiction a disease is not only inaccurate, it's often harmful," Lewis writes (repeatedly). "Harmful first of all to addicts themselves." The alternative, he asserts, is to call addiction what it is: a really bad habit caused by a constellation of variables and a brain that is receptive to compulsively reinforcing really bad habits. Most important, that habit is possible to break, not by becoming a "patient" getting medical attention in order to "recover", but by becoming a responsible adult with a solid vision of the future who has at last decided to break a destructive habit.
Lewis speaks not just from the Mount Olympus of academic science — he's a neuroscientist and professor of developmental psychology now in the Netherlands and previously at the University of Toronto — but also as a former addict himself. His book *Memoirs of an Addicted Brain*, which appeared in 2011, chronicled his tormented resume, from binge drinking in high school, to LSD and cannabis in college, to mainlining heroin and taking so many amphetamines that he once went psychotic. *The Biology of Desire* is less autobiographical but no less personal. Lewis is still the former addict, but in this book the neuroscientist takes charge, and the stories of other addicts provide the narrative drama.

"Most of the recovered addicts I've talked to would rather think of themselves as free — not cured, not in remission," he notes. "Having overcome their addictions by dint of hard work, intense self-examination, and the courage and capacity to regrow their perspectives (and their synapses) they'd rather see themselves as having *developed* through addiction and become stronger as a result." The italics are his.

And they are revealing because Lewis's fundamental argument is that addiction is overcome when people change their minds and choose to stop.

adapted from *The Washington Post*, 2015
Hard work is in her DNA

Charles Isherwood
Theater Review

1 In "Informed Consent", a thoughtful and engrossing play by Deborah Zoe Laufer, a research scientist specializing in genetic diseases finds herself embroiled in controversy when her fierce dedication to her work, and her deeply personal reasons for pursuing it, lead her into murky ethical waters.

2 Jillian, played with take-no-prisoners intensity by Tina Benko, is a genetic anthropologist whom we first meet in a rare moment of repose. She's writing a letter to Natalie, her young daughter. Trying to cast what she has to say in child-friendly terms, she begins on a storybook note: "Once upon a time ... There was a mother. Who had a monster sleeping inside her."

3 Realizing that this is perhaps a little too scary, she discards the idea and, at the urging of voices inside her head, tries a softer approach. "There was a mother who loved her little girl so much," she writes, "that she would do anything to save her." An ominous voice from the chorus chimes in, "No matter who got hurt."

4 The play, which opened on Tuesday at the Duke on 42nd Street theater, a co-production by Primary Stages and Ensemble Studio Theater, then moves back in time, to Jillian's years at university in Arizona. Here she preaches (directly to us, whom she jokingly calls her "cousins") for the wonders of genetic science with the fervency of an evangelical preacher. "Now that we can trace our genome, we're finally able to read the greatest story ever told," she says with excited awe, "the history of our species, written in our cells. All of the things we see as 'race' are about migratory patterns," she adds. "Race is a 'myth'."

5 Jillian's enthusiasm, and her obsessive dedication to her work, earn her the professional equivalent of a lottery win: Ken (Jesse J. Perez), a social anthropologist, enlists her aid in trying to help a Native American tribe in the Grand Canyon that has displayed alarming levels of obesity-related diabetes.

6 The tribe has only 670 living members, so the matter is of some urgency, and the tribe members' isolation from the world makes them an ideally uncorrupted gene pool, which thrills Jillian. (The play was inspired by real events.)
During this conversation, we also learn that Jillian hopes to ultimately specialize in Alzheimer's disease research. The reason is personal: Her mother died in her 30s with early-onset Alzheimer's. Jillian knows that she has probably inherited the gene mutation that caused it, and may have passed it along to Natalie.

"Informed Consent," directed by Liesl Tommy ("Appropriate") at a lightning-quick pace — a reflection of Jillian's race against mortality — unfolds the story of Jillian's eventually contentious interaction with the tribe and its representative, Arella (played with moving gravity by Delanna Studi), as well as with Ken and the university's dean (forceful Myra Lucretia Taylor). The director and excellent cast smoothly handle the play's complex structure, with narration and choral commentary slipped into dramatized scenes.

The first step in the study, obtaining blood samples, proves a battle because the tribe’s members believe their blood is sacred. Jillian persuades Arella — her translator and the only tribe member who speaks English — to intervene and convince as many members as possible to give up their blood, which she duly does.

And here's where Jillian's dedication to finding the key to the epidemic of obesity (beyond dietary matters) becomes corrupted by her belief that the study could lead to other genetic discoveries. Without giving too much away, I can say that her interest in exploiting the data for all its potential uses runs into conflict with Arella's — and Ken's — understanding that she was authorized to use it only for the diabetes study.

Staged on a handsome set by Wilson Chin that wittily uses a quartet of staircases in the same general shape as DNA spirals, "Informed Consent" has some speechy moments. But it raises provocative questions about the potential conflicts between scientific discovery and religious beliefs.

 Advances in science, Jillian firmly believes, are sometimes controversial. "They think we single-mindedly do experiments, know what we'll find, and then we get the answer," she says. "But real science is in the mistakes."

"Informed Consent" is a reminder that some mistakes must be paid for.

adapted from The New York Times, 2015
Poor Shakespeare must be turning in his grave

by Melanie Phillips

1 The new artistic director of London's Globe theatre, Emma Rice, says she sometimes struggles to understand Shakespeare's plays. As a qualification for the job, that's certainly imaginative. Might we now expect the governor of the Bank of England to confess he can't do long division or Bake Off's Mary Berry to reveal she labours to confect a sponge that doesn't come out of a packet?

2 The Globe, reconstructed in 1997, is a shrine to the works of Shakespeare. In 1599, the Bard's own theatre company built the original Globe on a site very close by. How can its management have appointed as artistic director a person who says some Shakespeare plays "feel like medicine", they make her "very sleepy" and that she'd prefer to listen to The Archers instead?

3 The depressing likelihood is that Ms Rice ticks all the boxes marked "relevance", "diversity" and "inclusion". She promises casting will be gender- and colour-blind, texts will be slashed, productions will be populist.

4 "There's no way that every line can still be relevant, in my opinion," she says. Her biggest fear is someone coming out of one of her shows and saying "that was boring" or "I didn't understand it". That's because she herself doesn't understand it. In particular, she doesn't grasp that Shakespeare doesn't need cuts or additions or trapeze artists gyrating in hotpants to David Bowie. In Shakespeare's plays, the words are everything.

5 The notion that they are unintelligible and off-putting to modern audiences, particularly the restless young, is wide of the mark. Properly taught or produced, the plays can connect to and inspire even the most unpromising audiences. Prince Charles, who is not only passionate about Shakespeare but has expended much energy upon rescuing disadvantaged and alienated youth through his Prince's Trust, understands this very well. More than a decade ago, he observed a class of difficult children at a pupil referral unit in Balsall Heath, Birmingham, responding with enthusiasm to the text of Romeo and Juliet, which they were being taught by an inspirational teacher.

6 Shakespeare's plays connect British children to their national identity. They also teach them everything they need to know about human nature and relationships, about love and death and ambition and conscience and betrayal. Yet for decades, teachers have sniped at their inclusion in the school curriculum on the grounds that they are boring, off-putting or a mummified form of an outdated nationalism.
In 1995 Professor Asher Cashdan, a teacher trainer, wrote in an educational magazine about "a right-wing witch-hunt" via the national curriculum. "I am continually amazed at teachers meekly accepting the imposition of Shakespeare plays on all pupils," he said. Less advantaged children would "make very little of a Shakespeare play and may be turned off all literature by having the Bard stuffed down their throats at an early age".

The repeated flinching at the apparent difficulty of the language derives from the view that children must never be presented with any obstacles. This explains the obsession with "relevance", or couching everything in the idiom of today's world. The result is the debasement of Shakespeare's sublime poetry.

Three years ago, Francis Gilbert wrote *Star-Crossed: Romeo and Juliet for Teenagers*. This used, in his own words, "modern phrases and obscene terms" to make the play "more approachable for 21st-century students". The obscenities in Gilbert's translation certainly jar, but not as badly as the plodding and excruciating banality to which he reduces Shakespeare's soaring imagery. So for example "It was the nightingale and not the lark/That pierced the fearful hollow of thine ear" becomes "you heard the nightingale singing, that means it's night-time; that's when they sing".

The accessibility of Shakespeare depends upon the intelligence, passion and talent of the teacher or theatre director. One teacher who didn't get it wrote a few years ago: "I think the most difficult thing about Shakespeare for kids is that they will never fully understand all of the nuances, because they come from culture long ago." But another wrote in reply: "I have seen academically challenged kids get excited when they figure out what 'Macduff was from his mother’s womb/Untimely ripped' actually means."

Shakespeare's language has to be decoded to be understood. Children love cracking codes because it gives them power. That enormously boosts their self-esteem. According to the American Alliance for Theatre and Education, performing Shakespeare's plays helps improve students' understanding of other complex material including science and maths.

Shakespeare's plays help the most disadvantaged. So, teachers or theatre directors who bowdlerise them or imbue them with "relevant" gimmicks treat the most disadvantaged with contempt, corrupt the work of the greatest playwright in history and debase our general culture.

Now this is happening at the Globe, of all places. Alas, poor Shakespeare.

adapted from *The Times, 2016*
An attempt to make football more beautiful

Alan Beattie

1 Summer is ending and a new soccer season is under way in the European leagues. This year, though, the clubs that dominate their top divisions are being closely marked by the regulators. Manchester City and Paris St Germain, respective winners of last season's English and French leagues, are having to cope with fines and spending limits under the Financial Fair Play regime. Introduced five years ago by UEFA, European football's governing body, the rules are beginning to bite.

2 That may not be a good thing. The problem the rules seek to address is real enough: a grotesque imbalance between a small handful of genuine championship contenders and a large pack of no-hopers. It is less clear, with inequality so strongly embedded in the game, that a relatively modest tweak will help.

3 The rules' "break-even requirement", broadly speaking, compels clubs to spend no more on players than they earn through gate receipts, broadcasting rights, sponsorship and merchandising. The aim is to prevent sugar daddy benefactors competition by subsidising huge losses. Manchester City and Paris St Germain's title races were bankrolled by the ruling families of the United Arab Emirates and Qatar respectively.

4 Rivalry, generally a positive thing, takes on a particular importance in sport, where competition is itself the product. Some markets may be natural monopolies: it is generally most efficient to have only one national railway system.

5 But even Manchester United fans, with their notorious sense of self-regard and entitlement offended by their team's horrendous start to the season, might struggle to see the point of an English Premier League with only Manchester United in it. In reality the Premier League is an oligopoly funded by oligarchs: the paucity of real competition means that only five clubs have won the league in its 21 years of existence, Manchester United coming top a tedious 13 times. The problem, as a succession of sports economists have lined up to point out, is that the break-even requirement is more likely to worsen than to improve competitive balance. The bigger clubs will continue to rake in huge sponsorship deals, which will ensure their continued dominance.
Greater off-field income means superior players, which means larger crowds and the ability to charge higher ticket prices. It will be harder for lesser clubs to climb from the lower divisions to the top.

That clubs run at a perpetual loss in itself seems unobjectionable unless they actually go bankrupt: often a big issue in the lower divisions, where a steady stream of wealthy egotists is harder to come by, but less so at the top. If the rich want to subsidise public entertainment, let them. In horseracing, Britain's second-biggest sport by revenue and attendance, proprietors have merrily been losing money for a century without anyone bothering them. In 2012 racehorse owners spent £369m on their nags and recouped just £85m in prize money and sponsorship.

One solution is obvious but improbable: for European football to copy the oval-ball game in the US. America's National Football League is quite simply socialism in one sport. Revenues are shared between the teams, there is a cap on overall salary bills, and the worst-performing teams one season have the pick of new players the next. It seems to promote balance: 13 NFL teams have won the 32-club Super Bowl in the past 22 years as opposed to the Premier League's five. When cricket's Indian Premier League was set up in 2008, it took a similar approach, with a salary cap and open auction for players, and rapidly became a massive success.

Sadly, even if European football clubs improbably agree on the principle of centralised revenue and redistribution, it will require all their leagues to adopt such a system simultaneously. Otherwise, those without a salary cap will poach the best players from those with. (Since essentially no one else in the world plays American football, it being a terrible game, this is not a problem for the NFL.)

Footballers start playing professionally much earlier than NFL players, and European clubs have their own youth schemes, so an auction or draft system for the best new players is not going to work. A modified version of US Major League Baseball's "luxury tax", where a percentage of rich clubs' spending on players above a certain limit is distributed elsewhere, might be easier to implement, but arguments about the formula for redistribution are likely to be fierce.

Bringing competitive balance to football is a laudable aim. But as things stand, the fair play rules will do little to achieve it. Nice idea; clumsy execution; potential own goal. Those of us used to watching lower-division football know the feeling.

The writer, an FT journalist, supports Chester FC, a fan-owned club in the fifth tier of English league football

adapted from an article from Financial Times, 2014
The following text is a part of the first chapter of Careless in Red, by Elizabeth George.

1 A light rain was falling when Daidre Trahair made the final turn down the lane that led to Polcare Cove. She switched on the windscreen wipers and created a mental note that they would have to be replaced, sooner rather than later. It wasn't enough to tell herself that spring led to summer and windscreen wipers wouldn't actually be necessary at that point. April had been notoriously unpredictable as usual and while May was generally pleasant in Cornwall, June could be a weather nightmare. So she decided then and there that she had to get new wipers, and she considered where she might purchase them. She was grateful for this mental diversion. It allowed her to push from her mind all consideration of the fact that, at the end of this journey south, she was feeling nothing. No dismay, confusion, anger, resentment, or compassion, and not an ounce of grief.

2 The grief part didn't worry her. Who honestly could have expected her to feel it? But the rest of it... to have been bled of every possible emotion in a situation where at least marginal feeling was called for ... That concerned her. In part it reminded her of what she'd heard too many times from too many lovers. In part it indicated a regression to a self she thought she'd put behind her. So the nugatory movement of the windscreen wipers and the resulting smear they left in their wake distracted her. She cast about for potential purveyors of car parts: in Casvelyn? Possibly. Alsperyl? Hardly. Perhaps she'd have to go all the way to Launceston.

3 She made a cautious approach to the cottage. The lane was narrow, and while she didn't expect to meet another car, there was always the possibility that a visitor to the cove and its thin strip of beach might barrel along, departing in a rush and assuming no one else would be out here in this kind of weather.

4 To her right rose a hillside where gorse and yellow wort made a tangled coverlet. To her left the Polcare valley spread out, an enormous green thumbprint of meadow bisected by a stream that flowed down from Stowe Wood, on higher ground. This place was different from traditional combes in Cornwall, which was why she'd chosen it. A twist of geology made the valley wide as if glacially formed — although she knew this could not be the case — instead of canyon-like and constrained by river water wearing away aeons of unyielding stone. Thus, she never felt hemmed in
in Polcare Cove. Her cottage was small, but the environment was large, and open space was crucial to her peace of mind.

5 Her first warning that things were not as they should have been occurred as she pulled off the lane onto the patch of gravel and grass that served as her drive. The gate was open. It had no lock, but she knew that she'd left it securely closed for that very reason the last time she'd been here. Now it gaped the width of a body.

6 Daidre stared at this opening for a moment before she swore at herself for being timid. She got out of the car, swung the gate wide, then drove inside.

7 When she'd parked and went to shut the gate behind her, she saw the footprint. It pressed down the soft earth where she'd planted her primroses along the drive. A mansized print, it looked like something made by a boot. A hiking boot. That put her situation in an entirely new light.

8 She looked from the print to the cottage. The blue front door seemed unmolested, but when she quietly circled the building to check for other signs of intrusion, she found a window pane broken. This was on a window next to the door that led outside to the stream, and the door itself was off the latch. Fresh mud formed a clump on the step.

9 Although she knew she should have been frightened, or at least cautious, Daidre was, instead, infuriated by that broken window. She pushed the door open in a state of high dudgeon and stalked through the kitchen to the sitting room. There she stopped. In the dim light of the tenebrous day outside, a form was coming out of her bedroom. He was tall, he was bearded, and he was so filthy that she could smell him from across the room.

10 She said, 'I don't know who the hell you are or what you're doing here, but you are going to leave directly. If you don't leave, I shall become violent with you, and I assure you, you do not want that to happen.'

11 Then she reached behind her for the switch to the lights in the kitchen. She flipped it and illumination fell broadly across the sitting room to the man's feet. He took a step towards her, which brought him fully into the light, and she saw his face.

12 She said, 'My God. You're injured. I'm a doctor. May I help?' He gestured towards the sea. From this distance, she could hear the waves as always, but they seemed closer now, the sound of them driven inland by the wind. 'There's a body on the beach, he said. 'It's up on the rocks. At the bottom of the cliff. It's … he's dead. I broke in. I'm sorry. I'll pay for the damage. I was looking for a phone to ring the police. What is this place?'

'A body? Take me to him.'

'He's dead. There's nothing—'

'Are you a doctor? No? I am. Take me to him. We're losing time when we could otherwise be saving a life.'
Future of our past?

1 Sir, The Heritage Alliance welcomes the debate on the future of English Heritage. The proposal, outlined with the summer Spending Review, is to create a new charity to manage the National Heritage Collection (some 420 sites of architectural, historical or archaeological importance) and a separate body to oversee the statutory heritage services that protect our historic environment — which is a source of national pride, an engine of economic growth, an inspiration to all and the envy of the world.

2 There are ironies in the timing and intent of the Government’s actions. This year, in which we celebrated the centenary of the Ancient Monuments Act, seems to close a century of beneficial state intervention in the historic environment, and now we need to build a different model that will work for the next century.

3 Our historic environment, whether in the hands of the state, charities or private individuals, creates both our sense of national identity and the context in which we, as citizens, can live meaningful lives. So it is disturbing that a consultation of the Heritage Alliance has been delayed by over two months.

4 I fear that the dilatory handling of this consultation thus far indicates a shocking lack of understanding of the importance of our historic environment. It is in the interests of all of us that both halves of the new English Heritage should be robust and sustainable.

5 Spending cuts have already removed £700 million worth of investment from the historic environment. The Chancellor’s autumn statement implied that more cuts were necessary to fund vital infrastructure projects. The historic environment is also infrastructure. It is time that we plan for it in generational terms rather than pandering to the short-termism of the electoral cycle.

Loyd Grossman
Chairman, The Heritage Alliance

*The Times, 2013*
Alarm bells are ringing
by George MacDonald

If Light-fingered Fred and Slippery Sam printed a few million in some back-street basement it would constitute criminal counterfeiting, because such nefarious activities might possibly cause people to distrust the purchasing power of the cash in their pockets or accounts, and possibly even destabilise the whole trust-based monetary system.

Now it has become clear that the money maestros are going to conjure up €40bn out of thin air — with basically nothing solid to back it up but a wavering, unproven hope that it might boost struggling European economies! But, apparently, if you do this and call it quantitative easing, it is somehow magically transmuted into legitimate financial practice.

adapted from www.independent.ie, 2014
CT SCANS

The reasons diagnostic imaging with computed tomography scans has increased and the limited scientific knowledge of the effects of this increased radiation exposure on inducing cancer in patients have been widely discussed. Nevertheless, one cause for the increase in CT scans is often neglected: 39. In the U.S., practicing physicians order diagnostic studies that they believe are appropriate. Radiologists, who are the experts in the advantages and disadvantages of different imaging modalities and are the ones that interpret the studies, have no ability to either reject or change them without permission from the ordering physician. Consequently, a certain amount of non-optimal and unneeded exams will be ordered. This generally occurs because of lack of communication with the ordering physician to optimize the diagnostic test (the American Board of Radiology has developed appropriateness criteria for diagnostic studies to address this issue). Sadly, it also occurs because in the current U.S. reimbursement structure, there is no financial incentive to cancel a non-indicated or non-optimized study.

adapted from Scientific American, 2013
DAILY EXPRESS

The BBC should not just peddle fashionable views
by Daily Express reporter

ANYONE who has followed the BBC's coverage of the climate change debate in any detail will surely be puzzled by a recommendation that it should give less weight to the views of sceptics. For it does not seem possible that it could give any less weight to those who doubt the strength of the link between carbon emissions and global temperature change, so partial is its approach. Professor Steve Jones, the author of a report on behalf of the BBC Trust, says the Corporation should not go out of its way to challenge "consensus" views among the elite. That is a dangerous argument and it should be ignored.

After all, the BBC has been found severely wanting after adopting just such an approach on other major issues. For years it marginalised sceptics of mass immigration because a pro-migration consensus existed among the metropolitan elite. Now it admits that it did not cover the issue properly.

So the BBC Trust report is 40. Good journalism should be about testing and scrutinising elites, not uncritically peddling their propaganda to the masses.

Daily Express, 2011