Welcome to issue 4 of GEOGRAPHY REVIEW Vol. 26. Here are some suggestions about how you might develop further some of the articles in the main magazine with your A-level and diploma students.

What future for the Amazon? (pp. 2–5)

This article draws on a substantial body of research and is well worth directing students towards reading. Not only is it beautifully written, it also provides a real insight into the extremely complex methodology used by the scientists.

Possible follow-up activities

1. A recent issue of National Geographic (January 2013) takes an in-depth look at the issues surrounding tropical rainforest conservation in Ecuador. The focus is Yasuni National Park, which encompasses nearly 9,800 km² of prime rainforest habitat. ‘The park sits at the intersection of the Andes, the Equator, and the Amazon region, an ecological bull’s-eye where extremely rich communities of plants, amphibians, birds, and mammals in South America converge.’ Yet the entire area is threatened by the presence of abundant oil resources below. President Rafael Correa has offered to leave the forest untouched if the world can provide Ecuador with US$3.6 billion in compensation (roughly half of what the oil is most likely worth at market). It is a fascinating proposal: find out more at http://ngm.nationalgeographic.com/2013/01/yasuni-national-park/wallace-text

2. The article illustrations can all serve as resources for practice exam questions. The following examples are suggestions.
Study Figure 2.

(a) Describe the pattern of biomass change shown in the Amazon region. [3 marks]

(b) Suggest possible human and physical reasons for declining biomass in parts of the Amazon basin. [6 marks]

Tip
For part (b), you should ideally aim to provide three distinct reasons, with some specific details or data included. At least one physical and human reason needs to be provided, in order to meet the specific demands of the question. Human reasons can include the removal of forest for agriculture; clearance for living space; clearance for biomass fuel/firewood. Physical reasons could include climatic variability, perhaps linked to long-term changes, or periodic changes associated with El Niño Southern Oscillation cycles.

The global digital divide (pp. 10–13)

The idea of technology ‘haves’ and ‘have-nots’ has been a recurring theme in geography for at least two decades now. The roll-out of each new generation of technology — from ISDN internet in the 1990s through to 4G services today — reignites old fears that certain places, or segments of society, will be ‘left behind’. Unfortunately, because old technology is perpetually out-classed by new innovation, there will always be some sort of ‘digital divide’ — early adoption is most likely in affluent core markets. That said, the rapid uptake of mobile telephones in LDCs, especially in African countries (where 40% of people now own a mobile across the continent) has given many people access to at least rudimentary digital technology.

Possible follow-up activities

1 The article illustrations can all be used to serve as resources for practice exam questions. This could be especially useful for schools following the Edexcel geography course (Unit 1: global networks topic). The following examples are meant as suggestions.

![Figure 2: Internet users by age and development level, 2011](source: The World In 2011: ICT Facts and Figures, International Telecommunication Union)
(2) Study Figure 2

(a) Describe how Figure 2 provides evidence for a ‘two-speed world’. [3 marks]

(b) Suggest how political and physical factors could contribute to the disparities shown. [2+2 marks]

Tip
For part (a), you should ideally identify more than one dimension to the ‘two-speed world’ or ‘digital divide’. For instance, uneven access according to age is shown within the developed world, in addition to the broader global development gap. In part (b), you should try to provide one detailed reason in each case. Some governments have been known to limit their citizens’ internet access — can you think of an example? And broadband access can be harder to roll out to continental interiors than it is to coastal areas — can you suggest a land-locked African state where connectivity could be limited, in contrast with coastal states such as Kenya?

2 As a classroom exercise, get students to think about how technology helps accelerate different strands of globalisation (economic, social, cultural, etc.) In each case, ask:

- What is technology being used for, and by whom? Citizens, civil society organisations, transnational corporations, governments? What different social and economic uses are made of technology, how is it being shaped by societies?
- Next, ask them to reflect on what ‘strands’ of globalisation they have been discussing (i.e. economic globalisation, social globalisation, political globalisation, etc.)
- Finally, ask them to reflect on how all of this would help them to plan an essay with the title ‘Examine how technology has helped accelerate globalisation’.

IB geography examination tip
At Higher Level, the IB course includes Paper 3: global interactions. Students are required to examine the extension and density of ICT networks, possibly at a global scale. When this topic was last examined, in 2011, examiners were looking for empirical evidence (data and statistics) of the number of users, bandwidth, etc. Clearly this article could be used to support teaching and learning of the topic.

The changing face of the Earth (pp. 16–19)
This article is a pedagogical tour de force, providing a fascinating look back at how geomorphology has developed as a discipline — and how geography teaching has followed — over the last 50 year.

Possible follow-up activities
1 There are many avenues to explore, especially with gifted and talented students who have their eye on progressing to read geography at university.

- Gradualism and catastrophism Until a few years ago, Year 13 students could still sit the AEA (Advanced Extension Award) exam in geography. One memorable essay title was: ‘Discuss the importance of time in physical geography’. Keen students might like to think about how they could plan for that essay, using themes from Ken Gregory’s article. In particular, the ideas about gradualism and catastrophism are worth exploring further.
Ask students to carry out an audit of all of the landforms they study at A-level and to consider the timescales over which they have been formed. Coastal landforms are interesting to think about. Spits and bars grow gradually over many years or even centuries due to the slow creep of longshore drift. Yet they can be breached or even obliterated by a tidal surge or tsunami. Aerial images of the 2004 Asian tsunami showed catastrophic effects on coastal morphology: http://www.geographyinthenews.rgs.org/newscasestudies/article/?id=347

- River restoration: This is a really interesting area of physical geography that schools could map into their departmental fieldwork or schemes of work for river management. Restoration work often synthesises, or brings together, elements of geomorphology and biogeography, making it a useful subject area for synoptic geography. Find out more at: http://www.therrc.co.uk/rrc_manual.php

Edexcel AS students can usefully study Table 1 and think about the different contributions these dating methods have made to our knowledge and understanding of climate change.

**The Wast Water screes (pp. 22–24)**

Knowledge of slope evolution and mass movement can be useful in a variety of A-level contexts, such as Earth hazards (OCR A2), coastal environments and glacial environments.

**Possible follow-up activities**

The idea that landscapes are the outcome of complex processes, sometimes operating at different times, is an important one. Acknowledging that ‘textbook’ explanations of landscapes are sometimes too reductive — and that there could be multiple explanations for some landform features — can be a characteristic of high-scoring A* work. Consequently, this article should be recommended to students who are aiming high with their A-levels and who have to examine glacial or upland environments in depth (for instance, people taking the Edexcel A2 research unit who have opted to study cold environments).

**Dankalia: the shaping of a hostile environment (pp. 28–32)**

This article provides an excellent overview of both the physical and the human geography of the Dankalia region. It can be used to support the teaching of numerous topics.

- First, synoptic-style studies of ‘extreme environments’ have a place in many geography courses.
- Second, knowledge of Dankalia links well with studies of tourism and rural landscapes (and potentially with economic development studies also).
- Third, the rift valley makes this a landscape that is highly relevant for studies of tectonic processes (and hazards).
- Fourth, it is clearly a key case study for arid geomorphology.

**Possible follow-up activities**

Students with a real interest in any of the topics mentioned above could undertake some additional research, as follows:
• **Tourism** Ethiopia is home to some of the most important UNESCO World Heritage sites. In order to break away from a dependent relationship with Western aid, capitalising on these resources could be an important strategy for Ethiopia. Find out more at: [http://www.travelethiopia.eu/](http://www.travelethiopia.eu/)


**IB geography examination tip**

The IB course includes the optional Paper 2 topic ‘extreme environments’. Students are required to ‘Examine the opportunities and challenges posed by the development of tourism and any associated settlement and communications in one type of extreme environment’. They also need to look at the challenges for resources and mineral exploitation. This article provides some excellent support. You can also view IB teacher Trevor Cole’s photography of the region at: [http://www.dailymotion.com/video/xlbvvo_photography-spotlight-presents-trevor-cole-s-gallery-ethiopia-africa_people](http://www.dailymotion.com/video/xlbvvo_photography-spotlight-presents-trevor-cole-s-gallery-ethiopia-africa_people)

**TNCs: the geography of ownership, profit and identity (pp. 33–37)**

**Possible follow-up activities**

There has been plenty of ‘geography in the news’ recently that is concerned with the ethics of the activities of TNCs (profits paid and supply-chain issues). Here are some current affairs stories that students might like to research further.

| Amazon and Starbucks accused of ‘tax avoidance’ in the UK | Despite its actions being perfectly legal, Starbucks was recently singled out by the media for allegedly unethical use of the ‘transfer pricing’ technique to limit its corporation tax liability in the UK. The TNC paid just £8.6m in corporation tax over the last 14 years of trading in the UK (and nothing at all in the last 3 years). This is despite UK sales of nearly £400m in 2011. David Cameron even remarked in a speech that it was time for companies to ‘wake up and smell the coffee’ (which many commentators saw as a ‘dig’ at Starbucks). Starbucks has now voluntarily agreed to pay more UK corporation tax, perhaps as much as £20m over the next 2 years. A good explanation of transfer pricing — the method Starbucks has used to limit its tax liability in some geographical territories — appears at: [http://www.bbc.co.uk/news/business-20580545](http://www.bbc.co.uk/news/business-20580545) |
| Horse meat supply chain scandal hits the UK | The biggest TNC story of the year so far is surely the news that UK supermarkets and food producers have been unwittingly using contaminated meat in their products. Horsemeat has been found — sometimes in significant amounts — in beef products. So too has pork, which is upsetting news for citizens who avoid it for religious reasons. Long supply chains, driven by a ‘race for the bottom’ in terms of product pricing, are the reason for this development — although many people find the ignorance of supermarkets inexcusable. After all, should they not take an interest in their suppliers? If they did not know that horsemeat was being illegally used at some abattoirs, what |
else do they not know about (such as animal welfare issues, hygiene, etc.). Convenience food producer Findus was the focus for media analysis shortly after the story first broke. The *Financial Times* newspaper (11 February 2013) investigated the geography of the Findus supply chain and reported seven stages, as follows:

1 **UK**: Horsemeat was found in lasagne made by the frozen-food company Findus (samples tested consisted of 60–100% horsemeat).

2 **France**: Findus was supplied by Comigel, based in northeast France.

3 **Luxembourg**: The Comigel products containing horse came from a factory in Luxembourg.

4 **France**: The Comigel factory in Luxembourg was supplied with meat from a company in France called Spanghero, whose parent company is Poujol.

5 **Cyprus**: Poujol acquired the meat from a Cypriot trader.

6 **Netherlands**: The Cypriot trader had subcontracted the order to a trader in the Netherlands.

7 **Romania**: The Netherlands trader was supplied from an abattoir and butcher in Romania, which had a license to export horsemeat within the EU.

As a result of the scandal, we can expect to see a shortening of some of the supply chains used by the food industry in the EU in future, which is a very interesting development for economic geography.

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| Pakistan and Bangladesh supply chain fires | The global textile trade has been under the spotlight recently due to serious fires at garment factories in Pakistan and Bangladesh. Low spending on health and safety makes both countries an attractive location for out-sourced manufacturing, at a time when workplace costs are rising in China. The supply chain links with these fires include:
|                                            | • Rapper P Diddy’s clothing range was made in the Bangladeshi workshop where 112 died in a fire in December 2012. Workers who survived the deadliest factory fire in the country’s clothing industry history say that as they tried to flee they found exits at the Dhaka building locked.
|                                            | • The Dhaka factory also made clothing for Western retailers including Walmart and The Edinburgh Woollen Mill.
|                                            | • German retail chain KiK relied on supplies from factories in Pakistan where around 300 people died in fires in August 2012.
|                                            | Find out more at: [http://www.bbc.co.uk/news/world-asia-20755952](http://www.bbc.co.uk/news/world-asia-20755952)
| ‘Reshoring’ is the new trend to follow     | Apple is a popular case study for students of economic geography and globalisation. After bad press (linked with supply chain working conditions) and some economic losses (due to supply chain disruption, e.g. after the Japanese tsunami), Apple recently announced it will be ‘re-shoring’ (or ‘de-globalising’) parts of its operations, even though labour costs are higher back in the USA. |
**Development Update Remittances: an economic lifeline (pp. 38–40)**

This is an important theme for human geographers because the flow of remittances is relevant to so many different topic areas, including migration, globalisation and development studies.

**Possible follow-up activities**

1. Overall, does migration result in economic losses or gains for source (sending) regions? This is an interesting idea to discuss with a class. While the flows shows in Figure 2 are clearly very substantial, we must consider how much wealth the migrants would be generating — through both production and consumption — if they had remained at home.

2. What happened to migrant remittances during 2009, when the world economy discovered it had a ‘reverse gear’? An interesting report can be read at: [http://news.bbc.co.uk/1/shared/bsp/hi/pdfs/08_09_09_migration.pdf](http://news.bbc.co.uk/1/shared/bsp/hi/pdfs/08_09_09_migration.pdf)

3. The article illustrations can all be used to serve as resources for practice exam questions. Here is a suggestion.

![Remittances Chart](chart.png)

**Figure 1** Remittances and other resource flows to lower-income countries, 1990–2014

(3) **Study Figure 1.**

(a) Describe the changes shown in remittances to lower-income countries between 1990 and 2010. **[3 marks]**

(b) Suggest **three** reasons for the changes you have described. **[2 + 2 + 2 marks]**
Tip
For part (b), you need to recognise that remittances are a ‘global flow’ — a key component of economic globalisation — and that your answer can therefore draw on ideas from globalisation and ‘shrinking world’ studies. Technology (easier transport, easier ways of transferring money) can therefore provide two of your answers. If you identified the ‘dip’ in 2009 in your answer to part (a), then explaining that can become part of your part (b) answer.

IB geography examination tip
At Higher Level, the IB course includes Paper 3: Global Interactions. Candidates are expected to be able to examine the relative importance of loans, debt repayment, development aid, remittances, foreign direct investment and repatriation of profits in the transfer of capital between the developed core areas and the peripheries. It is important that they have up to date facts and figures about the actual size or value of some of these flows — which Figure 2 certainly provides.