# Unit 8 Digital media

## 8a The Star Cave

## Reading digital exploration

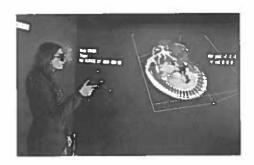
- 1 Look at the photo and the heading digital exploration. How do you think this woman is able to see this image?
- **2** Read a blog about Albert Yu Min and the Star Cave.

There's a paradox about technology. It's generally thought to be a positive thing, something that solves problems and helps us to be healthier and live more comfortably. But at the same time, it's also created a lot of problems for our planet: emissions from industrial plants are changing our atmosphere and plastic debris in our oceans is believed to be changing marine ecosystems irreparably as we speak.

So I was fascinated to read the other day about a use of new technology that combines exploration with conservation. An archaeologist called Albert Yu-Min Lin is doing archaeology in a kind of virtual reality way. Working with the California Institute for Telecommunications and Information Technology, Lin uses an array of digital 3D immersive technologies. What this allows him to do is to gather, synthesize, and visualize data using cutting-edge tools such as satellite imagery and ground-penetrating radar. This means he can make discoveries in areas where physical excavations would be either physically difficult or highly sensitive.

Lin works in a lab called the Star Cave, which is a totally immersive virtual reality room where scientists and historians can navigate, fly, and manipulate their way through landscapes. Backlit screens project images on the ground and walls, and special eyewear creates the 3D effect. Virtual explorers zoom over mountains, down slopes. So when Lin learns from an ancient text where a particular mountain or tomb was supposed to have been in the past, he can go into the Star Cave and travel around that region to find evidence of its existence.

- **3** Answer the questions.
  - 1 What is Lin's job, and how does he do it differently from others in his profession?
  - 2 What is the Star Cave?



## Language focus passive reporting verbs

- **4** Write these sentences from the blog using passive reporting verbs.
  - 1 Technology (generally / think / be) a positive thing.
  - 2 Plastic debris in our oceans (believe / change) marine ecosystems irreparably as we speak.
  - 3 The quest (know / frustrate) scientists and historians for centuries.
  - 4 The tomb (consider / be) an extremely sacred place.
  - 5 Lin learns from an ancient text where a particular mountain (suppose / be) in the past.
  - 6 These new approaches (expect / benefit) all kinds of projects in future.

## Vocabulary digital media

- **5** Cross out the verb that does not collocate with these nouns and adjectives.
  - 1 You can download / upload / listen to music for free on this website.
  - 2 Feel free to *blog / post / write* a comment and tell us what you think.
  - 3 I can use this software to chat / network / talk online to my parents 8,000 miles away in Australia.
  - 4 I don't really go on / tweet / use social networking sites.
  - 5 I always look online to see if others have *posted / recommended / reviewed* a **hotel** before I book it.
  - 6 I've been posting / writing / uploading my own blog for two years now.

## 8b Follow us!

## Reading exploiting social media

- 1 Look at these statements about businesses using social media. Do you think the statements are true (T) or false (F)? Then read the article and say which statements you can find evidence for.
  - 1 No one really wants to have a social media relationship with a business.
  - 2 With badly thought out social media, a company can lose business.
  - 3 Social media can increase goodwill but not actual
  - 4 Social media has to be fun to work.

#### Follow us!

A lot of business owners feel these days that they have no choice but to include social media on their websites. But just incorporating social media on your website is no guarantee of getting more business. However, there's no doubt that done well, social media can really attract customers.

One person who got in early, turning to social media in 2008, was country hotel and restaurant owner Antony Lloyd. He had marketed his hotel in guidebooks, magazines, had a basic website, and was looking for a way both to advertise more cheaply and to attract more customers. Social media was a relatively new phenomenon, but he saw no harm in trying. The results were dramatic. Within 18 months of joining Twitter, he had 1,000 followers and had generated \$200,000 of new business.

One of the keys to Lloyd's success is engaging his followers in subjects they find interesting. He tweets often, sending out messages not only about offers the hotel has, but also new items on the menu, local news, and a "Did you know...?" post with fun facts. Here's one: "Did you know that contrary to the phrase 'sweating like a pig' pigs can't actually sweat?"

### Language focus expressions with no

- **2** Complete these sentences using the given words and make expressions with *no*.
  - 1 There no sense (wait) for him. He's always late.
  - 2 There's no question (it / be) a mistake.
  - 3 No matter \_\_\_\_ (who / you / ask), you always get the same answer.
  - 4 It's no good (complain). They'll never give you your money back
  - 5 There's no hope (get) there on time.
  - 6 We have **no alternative** \_\_\_\_\_ (do) as he says.

#### Idioms business buzz words

**3** Complete the sentences with these business buzz words.

ballpark page		box practice	game reality	loop rocket		
1	I'd say 10	),000 is just a		figure.		
2	The CEO wants to be kept in theon this project. He wants to make sure that all goes smoothly.					
3	We need a plan. It's no good putting out a few advertisements and waiting to see what happens.					
4	I think our sales people will understand the product. It's not science.					
5	Distribution is the key. We need to look at examples of best in the					

- industry and follow that model.

  6 Are we on the same \_\_\_\_\_\_ here?

  I have the impression that you have different expectations for this initiative.
- 7 Innovation only happens when people think outside the \_\_\_\_\_.
- 8 We need a \_\_\_\_\_ check. Very few people use fax machines any more.

## 8c The Cleanweb hackathon

## Reading hacking to a brighter future

- 1 Look at the photo and the heading *hacking to a* brighter future. What do you think a hackathon is?
- 2 Read about a hackathon.

It's sometimes also called a hack-day or a hackfest, but basically a hackathon is an event where computer programmers and web experts come together to design new software or new apps. They usually take place over a day or a weekend and at the end the different teams present what they've come up with.

The designs are generally centered around a particular cause or a particular need, such as the Cleanweb Hackathon in New York. Cleanweb is a network of people dedicated to finding what are called "cleantech" solutions to environmental problems. This means applying technology, web, mobile, social media technology, to conserving resources, minimizing pollution, creating cleaner fuels, reducing waste, and so on.

One interesting idea is using social and mobile media to encourage less ownership and more efficient consumption. So, for example, you could set up a local neighborhood network on the web, a "resource cloud" as it was called, so that if someone needed a tool, like an electric drill, to do a job, he or she could send that request out to the community and someone would lend one rather than the person having to buy a new one.

Cleanweb also backs people who have good business ideas as well. One organizer said that most people have a kind of blind faith that humanity will innovate its way out of a future environmental crisis. But actually we're in a crisis now, and so according to him, firms and others had better start innovating now.

- **3** Find the following items in the article and underline them.
  - 1 two alternative expressions for a hackathon
  - 2 the typical length of a hackathon
  - 3 three kinds of technology Cleanweb uses to solve environmental problems
  - 4 four areas of environmental improvement that they address

- 5 what "the resource cloud" was being used to encourage
- 6 one thing that a neighbor might want to borrow from another

#### Word focus break

- **4** Complete these sentences and make expressions with *break*. The first letter of the missing words has been given for you.
  - 1 We've already spent \$2,500 on new equipment. Another \$50 isn't going to break the
  - 2 So, he's going to have to share an office with four other people. Shall I break the n\_\_\_\_\_\_to him or will you?
  - 3 I've bitten my nails since I was five years old and it's very difficult to break the h
  - 4 Thieves broke i \_\_\_\_\_ and stole \$10,000 worth of electronic equipment.

  - 6 Both the candidates promised to break the moderate of politics if they were elected.
  - 7 It's a very difficult piece of translation, but I think I've broken the b of it now.
  - 8 We broke e in our first year and this year we'll make a small profit.



## 8d Sauroniops

## Reading a dinosaur find

1 Read about a dinosaur find and complete the table.

A new study has detected a species of flesh-ripping dinosaur previously unknown to scientists, which is believed to have terrorized North Africa some 95 million years ago.

The species, *Sauroniops pachytholus*, was identified from a single fossil unearthed in southeastern Morocco in 2007 by a team of scientists led by Andrea Cau of the Bologna Geological Museum.

The fossil comprises only the upper part of the dinosaur's skull, but from this Cau has been able to conclude that this was probably a large two-legged meat-eater rather like Tyrannosaurus Rex and perhaps measuring as much as forty feet in length. The long shape of the skull suggests that *Sauroniops* had a large jaw with dozens of blade-like teeth.

The fossil also revealed a large bump on Sauroniops's already thick forehead, from which it appears that this dinosaur used its head in fights with other large dinosaurs. This fossil find reinforces the case that this area of North Africa seems to have been particularly popular with predatory dinosaurs. Such dinosaurs tended to gather where there was an abundance of food, and the warm climate and large river delta would certainly have attracted fish and crocodiles. But whether they fought each other, as the adventure movies like to show, is another matter. Arguably, says Cau, they targeted different prey and had no need to compete for food.

What is it?	
Where was it found?	THE PROPERTY OF THE PROPERTY O
Who found it?	
What does the discovery tell us?	
Ten da:	



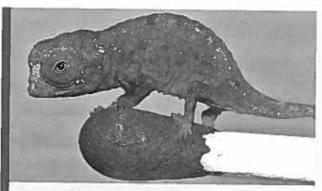
2	Language	skill	hedging	language

C he	omplete these statements from the article using edging language.					
1	which to have					
	terrorized North Africa some 95 million years ago					
2	Cau has been able to that this was a large two-legged meat-eater					
3	and measuring as much as forty feet in length.					
4	The long shape of the skull  Sauroniops had a large jaw					
5	The fossil also revealed a large bump on Sauroniops's already thick forehead, from which it this dinosaur used					
	its head in fights.					
6	this area of North Africa					
	have been particularly popular with predatory dinosaurs.					
7	Such dinosaurs gather where there was an abundance of food.					
8	, says Cau, they targeted different prey and had no need to compete for food.					
G	rammar review expressions with /no					
	ead the first sentence in each pair. Complete the pression with $no$ in the second sentence.					
1	It was easy to find your house.					
	I had no your house.					
2	Don't try to argue with her. She's always right.					
	There's no with her. She's always right.					
3	I'm not questioning his enthusiasm, but I don't think he has the experience.					
	I have no enthusiastic, but I don't think he has the experience.					
4	No one expected us to win.					
	There was no					
	Continuing our journey wasn't really an option.					
	There was noturn back.					
	He's determined to go ahead with the plan, whatever anyone says.					
	No, he's determined					
	to go ahead with the plan.					

## 8e World's smallest

## Writing an online news report

- 1 Look at the photo and then read this online news report and underline the parts of the report that answer these questions.
  - 1 Who features in the story?
  - 2 What did the zoologists do?
  - 3 Where did this happen?
  - 4 How did they do it?
  - 5 When did this happen?
  - 6 Why is this important?



## Brookesia micra

David Attenborough is one of the world's bestknown nature documentary makers, and there are few places on the planet that he has not been and few marvels of nature that he has not seen. So finding the pygmy chameleon on the main island of Madagascar half a century after he first began looking for it was very likely a moment of huge personal satisfaction for him.

Now German zoologists believe they have found an even smaller species, *Brookesia micra*, on one of the smaller Madagascan islands. Attenborough found his pygmy chameleon by looking on the forest floor among the leaf litter, where they generally live during the day. The German team used a different method to find *Brookesia*: searching with torches at night when the tiny chameleons climb into the trees and are said to be easier to spot.

The discovery is significant because it seems to suggest that in certain circumstances, such as being confined to an island, some animals grow smaller in order to adapt to a restricted habitat. *Brookesia* is almost certainly not the only chameleon to be part of this phenomenon.

#### 2 Writing skill cautious language

- **a** Read the report again and find examples of the following types of cautious language.
  - a the verb seem (para 3)
  - b a passive reporting verb (para 2)
  - c an adverb of degree (para 3)
  - d an adverb of frequency (para 2)
  - e adverbs that speculate about a fact (paras 1 and 3)
- **b** Make these sentences from the report more cautious using the given words.
  - 1 David Attenborough is one of the world's bestknown nature documentary makers.

(probably)

2 Attenborough found his pygmy chameleon by looking on the forest floor.

(seem)

3 German zoologists believe they have found an even smaller species.

(apparently)

4 The German team used a different method to find *Brookesia*.

(appear)

5 Some animals grow smaller to adapt to a restricted habitat.

(believe)

**3** Write your own online report using these notes. Write approximately 150 words.

We already know some species of snake can fly. Some can glide up to 330 feet.

But how?

New study from Virginia Tech has a possible answer. Snakes flatten their bodies to make a wing. Heads up, tails down, and glide. Probably no significance for airplane technology.



### Wordbuilding compound nouns

- 1 Complete these definitions with compound nouns. Use words from the definitions.
  - 1 A \_\_\_\_\_ is a brush that you use to remove dust and fibers from your clothes.
  - 2 \_\_\_\_\_ is the amount of rain that falls in a particular season or period.
  - 3 An \_\_\_\_\_ is a person who looks on at an event while it is happening.
  - 4 A is when machine—often a car—breaks down.
  - 5 A is a box for storing your tools.
  - 6 A \_\_\_\_\_\_ is the place in a room that is built to have an open fire.
  - 7 A \_\_\_\_\_\_ is an explanatory note that is written at the bottom or foot of a page in a book.
  - 8 A is a box where you can mail your letters.
  - 9 \_\_\_\_\_ is the condition when overexposure to the sun causes the skin to burn.
  - is decorative paper that you use to cover walls instead of paint.

## Learning skills intensive reading

**2** To build your reading speed and ability to comprehend more complex texts, you need to practice intensive reading. Read the notes. Then answer the question.

Intensive reading is when you read for an accurate and close understanding of the ideas and details in a text. This will often be necessary in work or study. Which of the following would you do if you were reading intensively?

- a check new words in a dictionary
- **b** skim the text first for a general understanding
- c try to break down complex sentences into manageable chunks
- **3** Breaking down text is a key skill with more complex writing. Read this complex sentence and then follow the steps (1–3).

Setting aside for a moment the question of whether you agree with his methods of collecting data or

not, the evidence that Jenkins has supplied implies that there is an increase rather than a decrease in the number of people under the age of 50 suffering from memory loss.

- Identify the main verb, the basic subject of the main verb, and the basic object of that verb.
- 2 Now define more precisely what the subject and object of the verb are.
- 3 Finally, look at any subordinate clause and say what the extra information they give relates to.
- **4** Follow these steps with other complex sentences in something you have to read in English.

#### Check!

- 5 Complete the sentences. The first letter of the words spells an unusual phenomenon. All the answers are in Student Book Unit 8.
- Unit 8b explains how companies are exploiting media to market their products and services.
- 2 Artist Liu Bolin is known as "The \_\_\_\_
- 3 Complete this phrase: " matter what you do, don't tell her."
- 4 Complete this phrase: "Please me in the loop."
- People who break into others' computers are called
- 6 Complete this phrase: "We try to think the box."
- 7 Phytoplankton are able to emit a blue from their bodies.
- 8 If you don't make a profit or a loss, you break

Phenomenon:

