

# Speed reading: forensic science on the BBC news

(на материале английского языка)

Учебно-методическое пособие для самостоятельной работы  
по дисциплине «Английский язык» для специальности «Судебная экспертиза»

Ижевск

2016

Лапекина Ю.Ю. Speed reading: forensic science on the BBC news: учебно-методическое пособие для самостоятельной работы по дисциплине «Английский язык» направления «Судебная экспертиза» / Ю.Ю.Лапекина, Ижевск, 2016. – 32 с.

Пособие направлено на развитие и совершенствование умений поискового, просмотрового и ознакомительного чтения аутентичных текстов у студентов специальности «судебная экспертиза», а также на знакомство с британской криминалистикой посредством новостного портала BBC News.

## CONTENTS:

The basic concepts (p. 6)

Skimming (p. 8)

Annotation (p. 10)

Scanning (p. 13)

Practice

Unit I. Forensic science education (p. 15)

Unit II. Career opportunities (p. 20)

Extra reading (p. 25)

References (p. 32)

## Методическая записка

Данное пособие составлено на основе методических принципов обучения чтению и рассчитано на развитие и совершенствование умений поискового, просмотрового и ознакомительного чтения аутентичных текстов у студентов специальности «судебная экспертиза». Оно подготовлено для самостоятельной работы студентов-судебных экспертов, и также может быть использовано студентами, магистрантами, аспирантами, преподавателями, интересующимися темой «Судебная экспертиза и британская криминалистика».

Среди основных целей работы с источниками на иностранном языке в академической студенческой среде мы выделяем:

- 1) обзор современных направлений зарубежных исследований;
- 2) знакомство с новостными статьями по определенной тематике;
- 3) подбор источников для написания научной, курсовой, дипломной работы, сообщения для конференции;
- 4) составление библиографического списка.

Чтение по специальности связано с познавательными потребностями, поэтому студентам так необходимы умения ознакомительного, просмотрового и поискового чтения. В бесконечном потоке информации важно уметь быстро извлекать из текста нужные сведения.

В пособии использованы материалы с британского новостного портала BBC News. И это не случайно. BBC News (British Broadcasting Corporation) – это самый популярный информационный сайт в Европе, а это значит, что в архивах корпорации содержится большое количество новостей разной тематики. Судебная экспертиза представлена достаточно широко.

Несомненным плюсом можно считать и тот факт, что новостные статьи на сайте BBC News отражают современный английский язык. Они написаны ярко, лингвистически экспрессивно и всегда содержательно. Они не отягощены большим языковым объемом и позволяют в разумно достаточный срок овладеть технологиями быстрого чтения текстов по специальности. Таким образом, привлечение в процесс обучения чтению профессионально ориентированных

новостных статей способствует повышению мотивации к получению данных из зарубежных новостных статей.

Пособие разработано в рамках читаемой дисциплины «Английский язык». Книга состоит теоретической части, в которой дается определение быстрому чтению и его видам, указывается их различие, дается подробная инструкция-алгоритм для работы с текстами. В практической части представлены статьи с новостного портала BBC News по разделам: forensic science education и career opportunities, а также задания для самостоятельной работы по освоению материала. Упражнения для поискового, просмотрового и ознакомительного чтения призваны систематизировать и отследить уровень усвоенного материала: 1) знакомство с новостными статьями BBC News по теме «Судебная экспертиза»; 2) анализ текстов по предложенным алгоритмам; 3) написание аннотации текста. Выполнение комплекса заданий служит выработке умений и навыков: 1) быстро узнавать лексический и грамматический языковой материал, 2) извлекать необходимые данные, 2) логично и связно представлять информацию в устной и письменной форме. К методическому пособию прилагаются дополнительные статьи в рубрике Extra reading.

Освоение материалов пособия ведет к формированию общекультурных, образовательных и профессиональных компетенций; расширяет кругозор в области судебной экспертизы и британской криминалистики.

## The basic concepts

Reading is one of the four language skills: reading, writing, listening and speaking. When we read we do not necessarily read everything in text. What we read depends on **why** and **how** we are reading. Sometimes you need to **read a text very quickly**. For example, we may read a travel website to find a single piece of information about prices. Also you wouldn't start at the letter **A** and read every word to look up the word 'forensic' in the dictionary. The most efficient way is to turn to the letter **F** and then find the words beginning with **fo-**. However, we may read an article about forensic science in detail because it contains the similar topic we are preparing for the conference. These examples show us that we read different text types and read for different purposes.

Today we are going to speak about two types of speed reading techniques:

Scanning	Skimming
reading for specific information	reading for the gist (the general idea)
Поисковое (при поиске конкретной информации) и просмотровое чтение (при беглом просмотре текста с целью выяснить, содержит ли этот текст какую-либо полезную читателю информацию).	Ознакомительное чтение, понимание основного содержания прочитанного. Текст читают быстро, с целью понять основное содержание и общую структуру текста или выбрать главные факты.
You might use scanning to:	You might use skimming to:
<ul style="list-style-type: none"> <li>• look up a word in a dictionary or index,</li> <li>• find an address or a phone number in a directory,</li> <li>• the index of books, web sites, and reference materials to prepare for the presentation,</li> <li>• look up details or prices in a catalogue,</li> <li>• pick out the website you want from options on a Google search, and etc.</li> </ul>	<ul style="list-style-type: none"> <li>• see what's in the news in a paper or on a website,</li> <li>• browse through a book to see if you want to read it,</li> <li>• look through the television guide to see what's on one evening,</li> <li>• flick through a catalogue to see what's on offer,</li> <li>• look through the options given on a Google search to see what sites it suggests, and etc.</li> </ul>

Skimming and scanning are reading techniques and they are both very important at our digital age. You don't have enough time to read the tons of texts word per word—and this is where these techniques come in handy. Both techniques are similar, but the purpose we use them for is different. Let's be clear on something: just looking over an article here and there, is neither skimming nor scanning. You need to follow a certain procedure in order for these techniques to work out effectively.

Skimming and scanning the news is an activity involving reading text on a website and answering questions on it.

*Activity 1. Look through the page and see how you can skim or scan it.*

## New police forensic science lab

You can **skim** to get an overall impression.

Headings and pictures can help you do this.

**A new state-of-the art forensic science lab is to be built in Dundee, the justice secretary has announced.**

The centre should be ready for police use by late 2009 and could see a seven-figure sum invested in it.



The lab should be up and running by late 2009

The Scottish Police Services Authority (SPSA) had proposed merging forensic work for Tayside, Grampian and Northern Constabulary at the new site.

However, Kenny MacAskill has asked the SPSA to re-examine the idea of closing the Aberdeen lab.

In the meantime, there will be no decision on shutting the facility in Aberdeen, which provides forensic services for Grampian Police and Northern Constabulary.

Activity 2. Read a front page of BBC News website and answer the questions.

## Reading a website

### Skimming (look at pictures and headings)

Is the website for adults, children, teens or language learners?

How do you know the website is for adults?

### Scanning (look for key words)

What topics are discussed on this site?

Where can you go to find about Facebook?

The screenshot shows the BBC News website front page. At the top, there are three main article thumbnails: 'The biggest problem with big data' (with a hand holding a glowing globe), 'The right way to describe Earth's shape' (with a hand holding a globe), and 'The women that kill, abuse and torture' (with a woman's face). Below these are social media links for Facebook and Twitter under the heading 'Follow BBC Future'. There is also a section for 'Editor's Picks' featuring 'Digital revolution in the developing world' and 'Facebook is becoming a giant graveyard'. An advertisement for 'HARDtalk' is visible on the right side.

## Skimming

### 🚦 Basic rules of effective skim reading

There are some basic tips that you should follow to skim effectively.

Tips:

1. Don't read every word.
2. Don't read every sentence.
3. Let your eyes move quickly.
4. Keep thinking about the meaning.

Focus on and underline:

- the title, the preface, sub-headings, subtitles, quotations,
- any diagram/pictures,
- the first paragraph,
- the last paragraph,
- the first line of the other paragraphs.



*Activity 3. Let`s practice together. Skim the text and follow the steps.*

## **New police forensic science lab**

**A new *state-of-the art* forensic science lab is to be built in Dundee, the justice secretary has announced.**

The centre should be ready for police use by late 2009 and could see a seven-figure sum invested in it.

The Scottish Police Services Authority (SPSA) had proposed merging forensic work for Tayside, Grampian and Northern Constabulary at the new site.

However, Kenny MacAskill has asked the SPSA to re-examine the idea of closing the Aberdeen lab.

In the meantime, there will be no decision on shutting the facility in Aberdeen, which provides forensic services for Grampian Police and Northern Constabulary.

### **'Best service'**

Mr MacAskill said: "When completed in 2009, this purpose-built facility will greatly enhance the provision of forensic services in Scotland, benefiting the Scottish police service and the wider criminal justice system.

"I am clear that all eight Scottish police forces, including Grampian and Northern, must receive the best possible forensic service.

"That is why I have approved SPSA's proposal for a much needed new forensic laboratory in Dundee, replacing the existing cramped and unsatisfactory facility."

**" What must not be compromised is the best possible forensic service available to all eight Scottish police forces "**

Nanette Milne MSP

SPSA chief executive David Mulhern added: "In the SPSA's first year, we have become the first part of the UK to deliver an integrated forensic service from crime scene through to court.

"Now as we enter year two, we are looking to ensure we have the foundations in place to deliver that integrated service for many years to come.

"The government has been persuaded by the clear and convincing case put forward for a new build laboratory facility in Dundee."

North East Conservative MSP Nanette Milne said: "I welcome the fact that the

government has taken on board concerns expressed regarding the proposed closure of the forensic science lab in Aberdeen and that the minister has instructed SPSA to look again at the future of the forensic science lab in Aberdeen.

"What must not be compromised is the best possible forensic service available to all eight Scottish police forces.

"The new lab in Dundee will provide for the forensic science needs of Tayside Police. However, what is now important is to make suitable provisions to provide the same facility for Grampian Police in Aberdeen."

Story from BBC NEWS:

[http://news.bbc.co.uk/go/pr/fr//2/hi/uk\\_news/scotland/tayside\\_and\\_central/7390569.stm](http://news.bbc.co.uk/go/pr/fr//2/hi/uk_news/scotland/tayside_and_central/7390569.stm)



*Activity 4. Answer the questions.*

1 From reading the title and the preface, what do you think the article is about?

.....  
.....  
.....

2 What specific information do the first and last paragraphs give you?

.....  
.....  
.....

3 Now read the whole article. What extra information did you get?

.....  
.....  
.....

4 Did it change your idea of what you thought the article was about?

.....  
.....  
.....

## Annotation

Skimming skills will definitely help you in writing annotations to articles you have read. An annotation is more than a brief summary of a book, article, or other publication. Its general purpose is to describe the work in such a way that the reader can decide whether or not to read the work him/herself. A more specific function is to point out the key information and use it in your course paper, presentation or a scientific research.

An annotation is not a rewrite of the original text. To write an annotation, use your own words to express briefly the main idea and important details of the text you have read.

There are some basic rules that you should follow to write good annotations.

### **Basic tips for writing effective annotations**

1. Find the important ideas, write down the important words/phrases and find alternative words, or synonyms.
2. The authority and the qualifications of the author should be clearly stated. *Mathieu Orfila, the founder of the science of toxicology, defined ...* .If the author is unknown, start with cliché: "This work/ is about..."
3. The scope and main purpose of the text must be explained. This is usually done in to three short sentences. Don't copy the article. Instead, paraphrase.
4. The level of reading difficulty, author`s writing style, used language should be indicated.
5. The annotation might conclude with a summary comment.

### **Useful vocabulary**

<i>Text/article/ book/essay/paper</i>	<i>is about, is devoted to, deals with, describes presents.</i>
Author (neutral style)	<i>believes, describes, explains, illustrates, mentions, observes, reports, reveals, says, shows, thinks, writes.</i>

Author <i>defines:</i>	<i>analyzes, concludes, considers, determines, finds, implies, infers, makes clear, predicts, states, suggests, tries to express.</i>
Author <i>criticizes:</i>	<i>argues, claims, defends, demands, disagrees, doubts, insists, objects, tries to convince the reader.</i>
Author <i>emphasizes</i>	<i>agrees/disagrees with the view of/ thesis, compares X to Y, is concerned in, emphasizes, explains, is interested in, points out, underlines, uses examples to confirm.</i>
Author <i>concludes</i>	<i>concludes, summarizes, sums up,</i>

*Activity 5. Read the example of an annotation of the article (9-10), follow the basic tips for writing effective annotations.*

*The article is about forthcoming building of a new modern forensic science lab in Dundee. The author predicts that the office should be ready for police use by late 2009 and costs sky-high investment. He insists on the fact that it would be the best possible forensic service available to all Scottish police forces. However, it hasn't been approved yet. The written style is clear and simple. There are only few professional words in the article. It is quite interesting in the fact that the British forensic science agencies are going to be upgraded.*

*Activity 6. Look through the useful vocabulary and write down your own annotation of this article.*



.....

.....

.....

.....

.....

.....

## Scanning

### ✚ Basic rules of effective scan reading

#### Tips

- Keep a question in mind while reading the text.
- Ignore unrelated information.
- Keep thinking about the meaning.

#### Focus on finding a particular answer:

- terminology,
- capitalized words or phrases in bold,
- numbers, dates, percentages,
- key-words like: "the best", "the most", "the worst", "the majority", "the minority", etc.,
- places, nationalities, countries, continents,
- repetitions and synonyms used in the same paragraph.



#### *Activity 7. Skim the text and answer the questions.*

1. What did the Ramsey case happen?
2. What type of crime was it as the police officer thought at first?
3. Who was the victim of the crime?
4. Why didn't the district attorney provide a search warrant on time?

### **Mistakes of the Ramsey case**

In the Ramsey case, the police in Boulder, Colorado, allowed contamination of the crime scene. Police thought Jon Benet had been kidnapped because of a note found by her mother. For this reason, the police did not search the house until seven hours after the family called 911. The first-responding police officer was investigating the report of the kidnapping.

The officer did not think to open the basement door, and so did not discover the murdered body of the girl. Believing the crime was a kidnapping, the police blocked off

Jon Benet’s bedroom with yellow and black crime-scene tape to preserve evidence her kidnapper may have left behind.

But they did not seal off the rest of the house, which was also part of the crime scene. Then the victim’s father, John Ramsey, discovered his daughter’s body in the basement of the home. He covered her body with a blanket and carried her to the living room. In doing so, he contaminated the crime scene and may have disturbed evidence. That evidence might have identified the killer.

Once the body was found, family, friends, and police officers remained close by. The Ramseys and visitors were allowed to move freely around the house and smudged footprint. One friend even helped clean the kitchen, washing the floor. Many hours passed before police blocked off the basement room. When the CSI units came to the scene it took them much time to label and collect the evidence. A pathologist did not examine the body until more than 18 hours after the crime took place. Nobody interviewed witnesses

The district attorney didn’t provide a search warrant on time. He was out of town and his assistant couldn’t make up his mind to do it instead of him. Officers at this crime scene obviously made serious mistakes that may have resulted in the contamination or destruction of evidence. To this day, the crime remains unsolved.

*Activity 8. Skim the text and fill in the table.*

<i>Crime scene professionals</i>	<i>Mistakes</i>	<i>What should they do?</i>
The first-responding police officer	...	...
The CSI	...	...
A pathologist	...	...
The district attorney	...	...



## Speed read

**BBC NEWS**

*I do think digital media encourages speed-reading, which can be fine if one is simply seeking information.*

Michael Dirda

### Unit I. Forensic science education

#### ❖ Warm-up

*Discuss the following questions:*

1. What do you think about profession of a forensic scientist? What are benefits of this profession?
2. Do you think getting a degree at forensic science is prestigious?
3. What courses do you study? Do you think the skills you have got or you are going to get will be suitable for the position of a forensic scientist?
4. Do you think the education abroad is the same/different comparing to Russia?

#### Article 1.

*Activity 1. Read the vocabulary, what do you think the article is about?*

#### ❖ Vocabulary

<i>a simulator</i> - тренажер	<i>to interpret blood spatter</i> – объяснить причины возникновения брызг крови
<i>to mock up</i> - копировать	<i>fibres</i> – волокно
<i>to resemble</i> – походить, иметь сходство	<i>the next generation of forensic examiners</i> – последующее поколение судебных следователей
<i>forensic scenario</i> – криминальный сюжет	<i>muddy ditches or on freezing hillsides</i> – грязные канавы или оледенелые горы
<i>to convict notorious murderers</i> – осудить знаменитых убийц	<i>a custom-built unit</i> – дом, построенный по проекту заказчика
<i>a kit</i> – набор инструментов	

*Activity 2. Skim the title and the preface, what do you think the article is about now?*

#### Forensic science simulator opened by Bernard Knight

**A forensic science simulator where crime scenes can be 'mocked up' is to be opened by Wales' best known forensic pathologist, Professor Bernard Knight.**



Students can learn the latest forensic science techniques

*Activity 3. Look at the pictures and read subtitles and quotations in the following text. Notice how this information will change your understanding of the article. What new pieces of information have you learnt?*

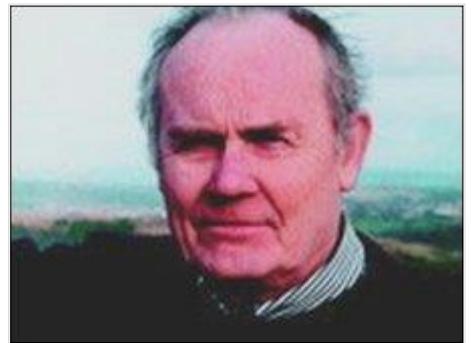
The University of Glamorgan simulator, which resembles an ordinary house, lets students recreate CSI-style complex forensic scenarios. Prof Knight said Wales could lead the way in training the next generation of scenes of crime officers. The building has been named after Prof Knight, who is also a crime novelist.

Since 1965 he has conducted more than 25,000 autopsies, and his evidence has helped to convict some of Britain's most notorious murderers, such as Fred and Rosemary West, and Mary Bell. Speaking ahead of the official launch of the Bernard Knight Scene of Crime building, Prof Knight said: "It is both an honour and something of a novelty to have a building named after me."

Prof Knight, from Cardiff, is well known as a prolific and celebrated crime writer. As well as penning the award-winning series of Crowner John novels he was the creator of the grandfather of all forensic science television drama, 1970s *The Expert*.

The Bernard Knight Scene of Crime Building has been built to look like a normal house, but can be configured to enable lecturers to reconstruct a variety of suspicious and unexplained deaths. Students, kitted in crime-scene barrier outfits, will have to measure and interpret blood spatter, hunt for DNA deposits and conduct finger-tip searches for trace evidence such as hair and clothing fibres.

Prof Knight said: "There is definitely a phenomenon which has come to be known as the CSI effect. Nowadays we all feel that we're experts on DNA, finger prints and trace evidence, and in some ways it's causing a bit of a problem. "Jurors expect more categorical proof than science will allow for, and criminals are better prepared than ever before." He added: "That's why facilities like this are so vital in furthering the science and enabling the next generation of forensic examiners to stay that crucial step ahead of the bad guys."



“ The abiding memories of my 40 years in forensic pathology seems to be mainly of standing over corpses in muddy ditches or on freezing hillsides at three in the morning ”

Bernard Knight

Currently the University of Glamorgan's Scene of Crime degree is the only course of its kind in Wales to be accredited by the Forensic Science Society. Prof Knight said that Wales could lead the way in training the next generation of Scene of Crime Officers. He said: "The abiding memories of my 40 years in forensic pathology seems to be mainly of standing over corpses in muddy ditches or on freezing hillsides at three in the morning, anywhere from Devon to Dyfed. "Attending a crime scene, however unattractive, is a vital part of the investigation and I am pleased to see a custom-built unit devoted to this important function." Tuesday, 16 March 2010  
[http://news.bbc.co.uk/2/hi/uk\\_news/wales/8565415.stm](http://news.bbc.co.uk/2/hi/uk_news/wales/8565415.stm)

*Activity 4. Scan the text and find the definition of the term: the CSI effect.*

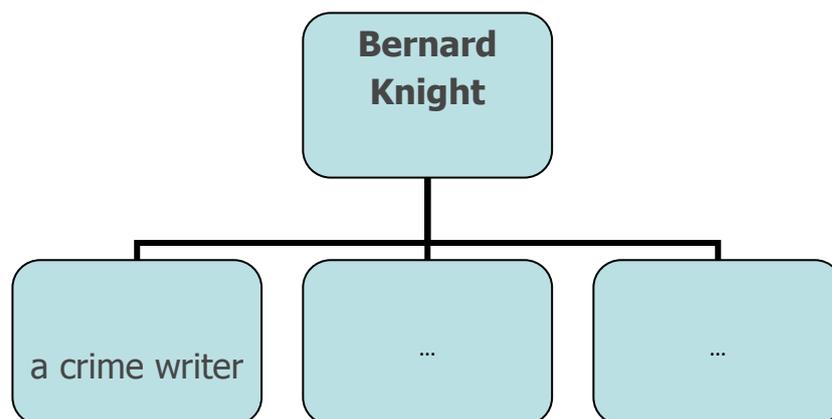
*Activity 5. Scan the text and make up a list of evidence pointed in the article.*

Activity 6. Decide what numbers and locations given below refer to?

25,000 1965 1970s 40

Wales Glamorgan Britain Cardiff Devon Dyfed

*Activity 7. Scan the article and fill in the gaps. Can you find more awards/services?*



*Activity 8. Scan the article and find out the answers to the following questions?*

1. Why is a forensic science simulator so popular among the students?
2. What famous murderers did Prof Knight help to convict?

3. What character of forensic science television drama did Prof Knight create?
4. What can students do in the Bernard Knight Scene of Crime Building?
5. What accredited the University of Glamorgan's Scene of Crime degree as a unique course of its kind in Wales?

*Activity 9. Write down the annotation to the article. Use the theory part (pp.11-12)*

### Article 2.



*Activity 10. Read the vocabulary, the title and the preface, what do you think the article is about?*

#### ❖ Vocabulary

queried – под вопросом	to seize a marketing opportunity – понимать маркетинговую уловку
a surge - волна	the detailed grasp of chemistry – углубленное знание химии
rigorous - точный	paucity – нехватка
to monitor the quality of – проследить за качеством	drugs company – фармацевтическая компания
to praise – хвалить	

### **Forensic science degrees queried**

**Concerns have been raised about the content of forensic science courses, following a surge in their popularity.**

*Activity 11. Scan the text and find definition to these terms: pure science, hybrid courses.*

Television dramas like *Silent Witness* and *Waking the Dead* have led many students to apply for such courses. But the Science, Engineering and Manufacturing Technologies Alliance (Semta) says the content is often not sufficiently rigorous. Semta warns many courses are hybrids, which do not offer the pure science degrees most police forces prefer. The report calls for better quality controls to be brought in to monitor the quality of the 350 forensic science courses on offer.

**"A degree in chemistry or some other pure science to be preferable to a degree in forensic science."** Semta's director of science and technology, Richard Smith, said: "Forensic science in its own right has been a success story, in that it has attracted young people to study science." And he praised universities for having seen an opening for science. "What universities have done in their own right is quite remarkable, in that they've seized a marketing opportunity. "And they've done an extremely good job in being able to promote science, which is great."

**Pure science.** But the major concern was that graduates from these courses did not have the detailed grasp of chemistry required by employers. "Both forensic science and other science employers consider a degree in chemistry or some other pure science to be preferable to a degree in forensic science," the Semta report warns.

"The few science employers who had knowledge about forensic science degrees criticized the course content for lack of clarity and consistency." Richard Smith said action must be taken for the future: "If we don't get science right now, there is likely to be paucity in the future and that is not going to address the real skills issues of 2014." A range of groups, including university course lecturers, students, police forces, drugs companies and other science employers were questioned for the report.

[http://news.bbc.co.uk/go/pr/fr/-/2/hi/uk\\_news/education/4012761.stm](http://news.bbc.co.uk/go/pr/fr/-/2/hi/uk_news/education/4012761.stm)

*Activity 12. Read the quotations in the text. Notice how reading these sentences gives you a good idea about the understanding the article.*

*Activity 13. Underline true sentences. Correct the false information.*

1. Semta says the content of television dramas is often not sufficiently accurate.
2. Most universities only promote science courses which are generally combined.
3. Forensic science lacks popularity among young people.
4. The majority of graduates from forensic science courses have a perfect knowledge of major subjects.
5. University course lecturers, students, police forces, drugs companies and other science employers were interviewed for the report.

*Activity 14. Write down the annotation to the article. Use the theory part (pp.11-12)*

## Unit II. Career opportunities

### ❖ Warm-up

*Discuss the following questions:*

1. What fields of forensic science do you know?
2. Are you interested in getting qualification of a forensic biologist, a forensic linguist, a crime scene investigator or a digital data investigator? Why?
3. What qualities of character do you think any of these specialists should have?
4. What types of qualifications are there at our university? What will be your major?

### Article 3.



*Activity 15. Read the vocabulary, what do you think the article is about?*

### ❖ Vocabulary

<i>to solve crime cases – раскрывать уголовные преступления</i>	<i>a method to quantify linguistic evidence – метод по определению лингвистических доказательств</i>
<i>to highlight – выделять</i>	<i>robust – надежный, требующий больших временных затрат</i>
<i>presumed death – предполагаемая смерть</i>	<i>to constrain – ограничивать</i>
<i>illustrative - характерный</i>	<i>a "sociolinguistic" profile of the author – социолингвистический портрет респондента</i>
<i>a descriptive approach – описательный подход</i>	<i>to make arrangements - улаживать (с кем-л.)</i>
<i>stylistic features – стилистические черты</i>	<i>an external validation – внешнее подтверждение</i>
<i>consistently – последовательно</i>	

*Activity 16. Read the title and the preface, what details have you gained from them?*

### The case for forensic linguistics

By Elizabeth Mitchell

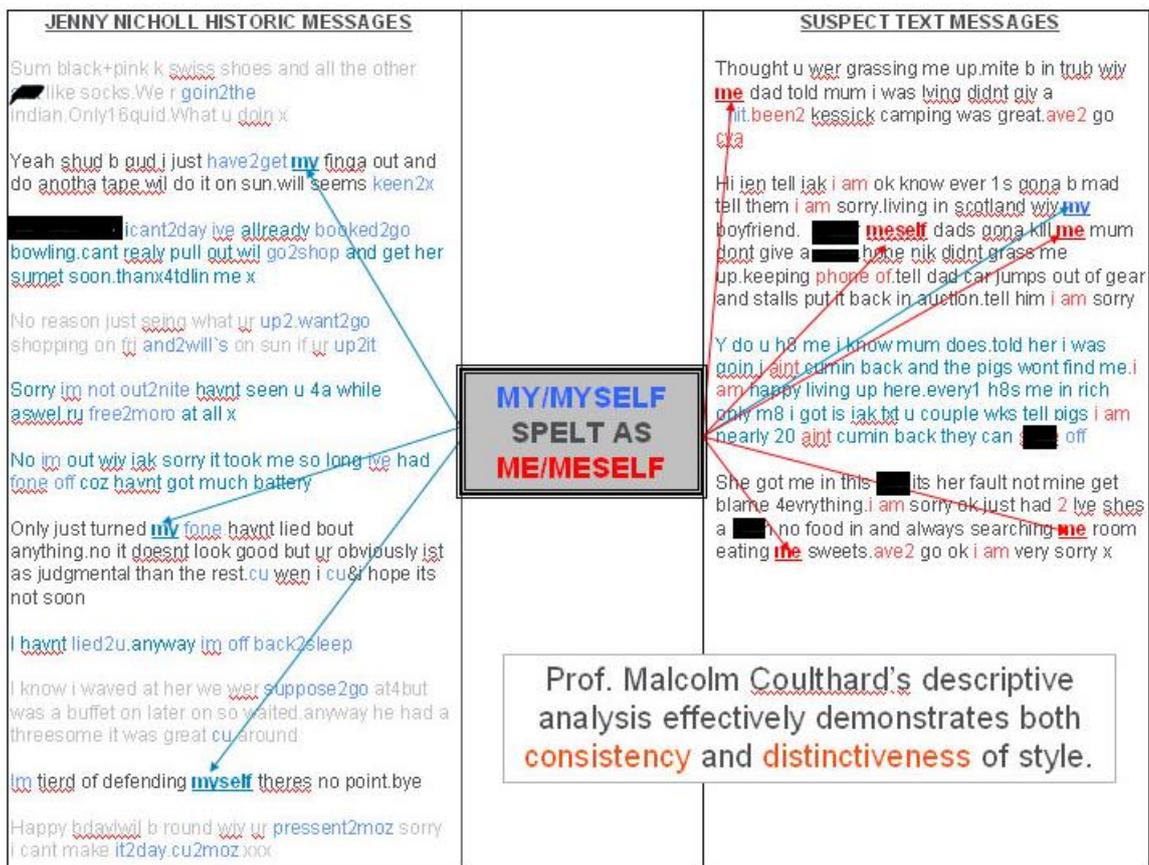
Science reporter, BBC News, Liverpool

**Text message analysis is becoming a powerful tool in solving crime cases.**

*Activity 17. Skim the first paragraph of the article. What was new technique used by forensic linguists? How did it work?*

In February 2008, linguistic evidence contributed to the conviction of David Hodgson in the murder of Jenny Nicholl. The case highlighted how people choose their own text language "rules" - which they tend to use throughout all their messages. Forensic linguists showed that text messages sent from Jenny's phone after she went missing had a style that was more similar to that of David Hodgson.

Jenny Nicholls' body was never found, but the jury accepted the prosecution's view that Hodgson had been sending texts on her mobile after her presumed death and found him guilty of murder. The case is illustrative of what can be achieved by analyzing mobile messages, said Dr Tim Grant from the Centre for Forensic Linguistics at Aston University. He is speaking here in Liverpool at the British Association Science Festival. Identifying the author of an anonymous text message might seem like an impossible challenge as they are typically very short and fragmented.



An example of the linguistic evidence that contributed to the conviction of David Hodgson in the murder of Jenny Nicholl. Jenny Nicholl used "my" and "myself" while David Hodgson often adopted Yorkshire dialect, using "me" and "meself."

Traditionally, forensic linguists use a descriptive approach. They demonstrate that there are several stylistic features that are consistently used in messages where they know the author. Forensic linguists look to see whose style is most similar to that used in any disputed texts.

**Text database** Dr Grant has developed a method to quantify linguistic evidence that can be later used in court. He has built a specialized language database of over 8,000 text messages and analyzed them using robust statistical methods that he has adapted from those originally developed by forensic psychologists investigating sexual crimes.

"Collecting the data is a continuous process - language changes and moves on all the time," said Dr Grant. Forensic linguists rely on police evidence to constrain the number of possible authors: "As the numbers grow the statistical power weakens," explained Dr Grant. During his lecture at the BA Science Festival in Liverpool on Monday, Dr Grant will collect and analyze text messages from audience members.

Forensic linguists can also build a "sociolinguistic" profile of the author: they can give an idea of a texter's gender or age - but not their personality. "What you find is very stereotypical - women tend to be inter-personal while men make arrangements," said Dr Grant. "The more features I can reliably move into a personal description - the more powerfully I can discriminate," he added.

On 1 September 2008 the Council for the Registration of Forensic Practitioners - a government-based body which promotes confidence in forensic practice - recognized forensic linguistics as a speciality. "This is external validation that forensic linguistics is moving from an expertise-based opinion into the scientific field," said Dr Grant.

Story from BBC NEWS: <http://news.bbc.co.uk/go/pr/fr/-/2/hi/science/nature/7600769.stm>

*Activity 17. Skim the first lines of the text and make a list of procedures and methods used by forensic specialists in investigating crimes.*

*Activity 18. Skim the second paragraph of the article and learn how the testimony of a forensic linguist by analyzing mobile messages convinced the jury to find the suspect guilty.*

*Activity 19. Read the last paragraph of the text and find out when and how forensic linguistics recognized as a speciality.*

*Activity 20. Now skim the whole article. What extra information have you got?*

*Activity 21. Scan the picture and write down SMS slang for neutral words and phrases given below: answer, am not, because, good, phone, when, see you, for you, your, tomorrow, have to, been to, going to.*

#### **Article 4.**



*Activity 22. Read the vocabulary, what do you think the article is about?*

#### ❖ *Vocabulary*

*to retrieve* – находить

*sift through the documents* – внимательно анализировать документы

*the extent* – экстенд (непрерывная область, напр., в памяти с прямым доступом, резервируемая для определенного набора данных)

*to plead the fifth amendment* – воспользоваться пятой поправкой Конституции

*to destroy compromising files* – удалять компрометирующие файлы

*financial fraud* – финансовое мошенничество

*to attach one`s computer to a network* – соединить чей-то компьютер с сетью (с интернетом)

*sensitive information* – ценная (служебная) информация

*misuse* – неправильное использование

*intellectual property* – интеллектуальная собственность

*to wade through* - разбираться

*Activity 23. Read the title and the preface. Ask three questions that you would like the text to answer.*

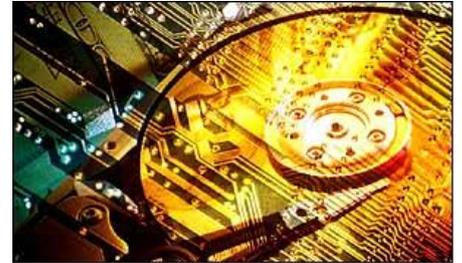
#### **Uncovering a computer's secrets**

**BBC World ClickOnline's Mark Eddo discovers how easy it is to find data on a hard disk even if it has been deleted or reformatted.**

*Activity 24. Read the first and last paragraphs. What do you expect the article to be about?*

As the list of corporate scandal grows, so too does the mass of digital data investigators have to wade through. This is where computer forensics experts come in. Their task is to help retrieve information regardless of how well it is hidden.

"Computer forensics can play a very important part in that process," explained Peter Yapp of Control Risks Group.



Hard drive can contain crucial evidence

"But of course it's not the full story because you still need to combine traditional investigative techniques, such as interviewing and sifting through documents, with computer forensics. "What they have to determine is the extent to which the controlling mind of the company, the directors, knew what was going on, because the fifth amendment has been pleaded so they're not going to say a great deal to the regulators at the moment," he said.

**No hiding place.** Just pressing the delete key on the keyboard will not destroy compromising files. Computer forensics experts are so thorough that it is virtually impossible to destroy data once it has been saved on a hard drive. And the task becomes even harder if the computer is on an office network. "You may be able to control what's on your computer, and you may do your best to delete things and cover them up, and even then you're unlikely to succeed 100%," said financial fraud investigator Simon Dawson. "But as soon as you attach your computer to a network there are a whole load of other places that information could be stored so potentially it could be anywhere throughout the world." "If you want to destroy sensitive information on a computer, you're looking at total destruction of that hard drive as the only 100% option," he said.

Some 40% of the cases involving computer forensics techniques are related to child pornography. The other 60% are divided between workers' misuse of company computers, intellectual property and fraud. In the current climate of financial irregularity, computer forensics labs are likely to be kept very busy.  
<http://news.bbc.co.uk/2/hi/technology/2226182.stm>

Activity 25. What do the numbers given in the table refer to?

40%	
60%	
100%	
100%	

Activity 26. Scan the text and find out the investigative ways in solve computer crimes.

№	Traditional investigative techniques	New investigative techniques
1.		
2.		
3.	...	...

Activity 27. Look through the text and answer the questions.

1. What is computer forensics?
2. What is the role of a digital data investigators nowadays?
3. Why is the data of corporate companies come out?
4. Is it possible to delete compromising files?
5. What types of cases involving computer forensics techniques are related to?

Activity 28. Write down the annotation to the article. Use the theory part (pp.11-12)



## Extra reading

Activity 29. Skim the titles and prefaces. What are the main ideas of the articles? How do the pictures help you in predicting the plot? Explain your opinion.



### Text messages could solve crimes

**Text messages could soon regularly become crucial clues in solving crimes, according to experts from the University of Leicester.**

A team of researchers has begun a detailed study into text messaging styles, with the hope their research will help forensic investigations. It was prompted after an examination of a text message helped to solve the 2002 murder of Danielle Jones. It is believed to be the first study of its kind.

#### Personal styles

Teams will look at individual styles and habits of groups that text each other. Dr Grant, said: "One feature of text messaging is that it is creative, there are very few rules that people try to obey. "We don't try to be grammatical or follow ordinary spelling, because of that potential for creativity, there's more potential for variation. "There's the possibility that one person uses predictive text functions and others use traditional texting abbreviations, so it is possible to spot these differences." He said the study was inspired by a 2002 case in which lorry driver Stuart Campbell was convicted of murdering his 15-year-old niece, Danielle Jones, after texts sent on the victim's mobile were alleged to be his.



"What was argued in court by the forensic linguist was that the messages from the girl's phone were in the style of the uncle who was trying to text as a teenage girl but there were significant differences in the style and that was able to break his alibi," he added.

Researchers have appealed for members of the public to send their text messages for analysis via the university's website.

[http://news.bbc.co.uk/go/pr/fr/-/2/hi/uk\\_news/england/leicestershire/4779981.stm](http://news.bbc.co.uk/go/pr/fr/-/2/hi/uk_news/england/leicestershire/4779981.stm)

## Four hours for forensic DNA test

By Paul Rincon Science reporter, BBC News



**Forensic scientists have developed a test that can match a suspect's DNA to crime scene samples in just four hours.**

The new technique could greatly speed up forensic DNA testing, making the process almost as easy as matching fingerprints. Police could check whether a suspect's DNA matches profiles in a database before a decision is taken on whether to release them from custody.

Researchers describe their approach in the journal *Analytical Chemistry*. Their report points out that a large number of individuals re-offend while on police bail. In the UK, 75% of people arrested are released from police custody within six hours and 95% are released within 24 hours. At the UK's Forensic Science Service (FSS), urgent samples can be prioritised on request and, once delivered to a lab, can be processed in about eight hours. But even this is labour intensive and relatively expensive, say the researchers.

A team led by Andrew Hopwood from the FSS and Frederic Zenhausern from the Center for Applied NanoBioscience and Medicine in Arizona, US, set out to develop a system capable of processing a sample and generating a DNA profile within a six-hour window. The researchers built an instrument with a DNA processing cartridge and a special chip to analyse DNA samples from a cotton swab.

Forensic technicians can collect DNA from suspects by swabbing the insides of their mouths, mixing the sample with a few chemicals, and warming it up. The device does the rest, producing a genetic profile that can be compared against crime samples in a database. The process, from taking a cheek sample, to the production of a DNA profile, takes about four hours.

The researchers believe that by optimising the process, they should be able to cut this to three hours in the near future. But in order to get the most out of the technology, they argue, it must be supported by a capability that allows law enforcement officers to search for matches in real time. Neither the Federal Bureau of Investigation's (FBI) CoDIS DNA database, nor the UK National DNA database can currently support rapid DNA testing technology.

Writing in *Analytical Chemistry*, the researchers add: "While the operation of the instrument is straightforward, a good level of training is required before the instrument can be operated." "But we believe that any individual with a basic scientific education could become competent." <http://www.bbc.com/news/science-environment-10873706>

## **Forensic science uncovered**

By Tom Feilden, Science correspondent, Today

Fans of TV crime shows like *CSI* or *Silent Witness* should get down to the Natural History Museum tonight for the chance to suit-up and try their hand as a forensic science investigator.

Entomologists at the museum have set up a mock crime scene - complete with arc-lights, screens, a (thankfully fake) decomposing corpse and plenty of writhing Greenbottle maggots - as part of *Science Uncovered: A Europe-wide event offering the public a rare insight into what goes on behind the public galleries.*



More than a hundred museums and institutes across the EU will be throwing open their doors to mark the event tonight, with some 300 researchers at the NHM staying late to discuss their work, answer questions, and give people a tour around the warren of backroom stores and laboratories.

The evidential value of entomology may come as no surprise to lovers of crime fiction, but the fact that it is scientists at the Natural History Museum - more normally associated with the fossilised remains of long dead plants and animals - who are pushing the boundaries of modern forensic science, comes as something of a revelation.

"The entomologists and forensic anthropologists here at the museum are among the leading researchers in the field," says Dr Martin Hall. "We regularly help the police

to determine how long someone has been dead. Insects are fantastic for answering that question."

And if dead and decomposing bodies aren't your thing you can test your knowledge of the rules of taxonomic nomenclature by suggesting new names for five species of deep-sea worm, recently discovered around hydrothermal vents off Antarctica.

"The name of a species is very important," says NHM Zoologist Dr Adrian Glover, "it connects all the information that is known about a species and is unique. This is a once-in-a-lifetime opportunity for visitors to name a new species."

There's plenty on offer for the more traditional naturalist too with a panel of experts on hand to help identify that fearsome spider you've cornered in a matchbox, the interesting rock or fossil you picked up on the beach, or potential meteorite that's been sitting on the mantle piece.

Antiques Roadshow eat your heart out.

<http://www.bbc.com/news/science-environment-15034433>

## **Forensic jeweller unravels secrets of the dead**

By Graeme Ogston BBC Scotland Tayside and Central reporter

**The grim task of forensic science and the glamour of jewellery may seem worlds apart. But for Maria Maclennan, the world's first forensic jeweller, the pair can be a perfect match in unravelling the secrets of the dead.**

Ms Maclennan, 27, a Dundee PhD student, has spent the past five years helping investigators identify victims by studying jewellery found at crime scenes or disaster sites. These include the Germanwings crash site in the French Alps in March last year and the Mozambican airliner which crashed in Namibia in 2013.

Ms Maclennan, who grew up in Muir of Ord, will complete her four-year PhD project in forensic jewellery at Dundee's Duncan of Jordanstone College of Art and Design in October. She said: "What seemingly might be two quite opposite fields are not as distant as one might think."

The 2015 Germanwings air disaster is one of the tragedies Ms MacLennan was consulted on. "They involve experts with training looking at real detail that other untrained eyes might miss and looking at them in a way we can glean information about an individual and perhaps their life and family. "Jewellers have been intrigued for centuries by the notion of identity in the human body and why people wear jewellery and its symbolic nature and traditions."

**Vital clues.** After studying jewellery at art college, Ms MacLennan worked with designers, forensic anthropologists and police officers during her Masters degree on a project at Dundee University's renowned Centre for Anatomy and Human Identification. This involved working on a jewellery database classification system to assist victims' families trying to describe individual items. Particular engravings or personal inscriptions might have some clues as to who the owner was Maria MacLennan, Forensic jeweller. Ms MacLennan said: "It opened up jewellery and human identity in a way I hadn't thought about." "I took elements of that research forward into a PHD proposal. I just got really fascinated with the research and felt that we'd maybe been missing a trick, that these two disciplines had not really spoken."

Jewellery can withstand high-impact, extreme-temperature environments associated with disasters such as plane crashes, leaving vital clues for investigators. Ms MacLennan said: "I was deployed over the last couple of years for various mass fatalities, mainly aviation crashes but also building collapses. "One of the companies I work with on a freelance basis is a disaster response company, so I'm part of a database of experts. "Certainly through the contacts I've made and the people I've worked with, I now know that there's a need for the research."

**'Microscopic level'.** Closer to home, Ms MacLennan has also been contacted by murder investigators who have found jewellery at a crime scene. She said: "Particular engravings or personal inscriptions might have some clues as to who the owner was. "Equally, there are a lot of genealogical markings, serial numbers and inscriptions that appear at microscopic level on gemstones and watches." "When they are brought in to be repaired, all these little marks all link, in some way, the jewellery to a particular location." "Some of the research was on hallmarks and how they might be able to narrow down where an item was made and who made it."

Ms MacLennan will give a talk on forensic jewellery at the Dundee International Design Festival on 28 May. She said: "It seemed to me there was a lot of knowledge in the jewellery industry that might be of benefit in the forensic context that perhaps wasn't being tapped into. "I'm always very open with people and say it's a very exploratory and new field and I'm using the PhD to explore the potential and try and create a basis for further research. "I think coining the phrase "forensic jeweller" really did help in engaging the scientific and design communities and how they responded to the idea of these two fields working together."

<http://www.bbc.com/news/uk-scotland-tayside-central-36151110>

Activity 30. What new information have you learnt? What professions and matters are described in the texts? What impressed/disappointed you most?



## References

1. <http://library.weber.edu/ref/guides/howto/annotations.cfm>
2. <http://pesbd.com.bd/2016/05/what-about-skimming-and-scanning/>
3. <https://www.aacc.edu/tutoring/file/skimming.pdf>
4. <http://www.bbc.co.uk/skillswise/topic/skimming-and-scanning>
5. <http://www.bbc.co.uk/skillswise/factsheet/en05skim-l1-f-what-is-scanning>
6. <http://www.bbc.com/>
7. <http://www.dori-ielts.com/what-about-skimming-and-scanning/>
8. <http://www.enotes.com/homework-help/definition-scanning-skimming-according-reading-213249>
9. <http://www.howtolearn.com/2013/02/skimming-and-scanning-two-important-strategies-for-speeding-up-your-reading/>
10. <https://www.rit.edu/ntid/rate/sea/processes/comprehension/process/after>
11. <http://www.uefap.com/reading/efficien/skim/skim.htm>
12. [www.42explore.com/skim.htm](http://www.42explore.com/skim.htm)