ROBOTS AT WORK

A
The newspaper production process has come a long way from the old days when the paper was written, edited, typeset and ultimately printed in one building with the journalists working on the upper floors and the printing presses going on the ground floor. These days the editor, subeditors and journalists who put the paper together are likely to find themselves in a totally different building or maybe even in a different city. This is the situation which now prevails in Sydney. The daily paper is compiled at the editorial headquarters, known as the prepress centre, in the heart of the city, but printed far away in the suburbs at the printing centre. Here human beings are in the minority as much of the work is done by automated machines controlled by computers.

B
Once the finished newspaper has been created for the next morning’s edition, all the pages are transmitted electronically from the prepress centre to the printing centre. The system of transmission is an update on the sophisticated page facsimile system already in use on many other newspapers. An imagesetter at the printing centre delivers the pages as film. Each page takes less than a minute to produce, although for colour pages four versions, once each for black, cyan, magenta and yellow are sent. The pages are then processed into photographic negatives and the film is used to produce aluminium printing plates ready for the presses.

C
A procession of automated vehicles is busy at the new printing centre where the Sydney Morning Herald is printed each day. With lights flashing and warning horns honking, the robots (to give them their correct name, the LGVs or laser guided vehicles) look for all the world like enthusiastic machines from a science fiction movie, as they follow their own random paths around the plant busily getting on with their jobs. Automation of this kind is now standard in all modern newspaper plants. The robots can detect unauthorised personnel and alert security staff immediately if they find an “intruder”; not surprisingly, tall tales are already being told about the machines starting to take on personalities of their own.

D
The robots’ principal job, however, is to shift the newsprint (the printing paper) that arrives at the plant in huge reels and emerges at the other end some time later as newspapers. Once the size of the day’s paper and the publishing order are determined at head office, the information is punched into the computer and the LGVs are programmed to go about their work. The LGVs collect the appropriate size paper reels and take them where they have to go. When the press needs another reel its computer alerts the LGV system. The Sydney LGVs move busily around the press room fulfilling their two key functions to collect reels of newsprint either from the reel stripping stations, or from the racked supplies in the newsprint storage area. At the stripping station the tough wrapping that helps to protect a reel of paper from rough handling is removed. Any damaged paper is peeled off and the reel is then weighed.

E
Then one of the four paster robots moves in. Specifically designed for the job, it trims the paper neatly and prepares the reel for the press. If required the reel can be loaded directly onto the press; if not needed immediately, an LGV takes it to the storage area. When the press computer calls for a reel, an LGV takes it to the reel loading area of the presses. It lifts the reel into the loading position and places it in the correct spot with complete accuracy. As each reel is used up, the press drops the heavy cardboard core into a waste bin. When the bin is full, another LGV collects it and deposits the cores into a shredder for recycling.

F
The LGVs move at walking speed. Should anyone step in front of one or get too close, sensors stop the vehicle until the path is clear. The company has chosen a laserguide function system for the vehicles because, as the project development manager says “The beauty of it is that if you want to change the routes, you can work out a new route on your computer and lay it down for them to follow”. When an LGV’s batteries run low, it will take itself off line and go to the nearest battery maintenance point for replacement batteries. And all this is achieved with absolute minimum human input and a much reduced risk of injury to people working in the printing centres.

G
The question newspaper workers must now ask, however is, “how long will it be before the robots are writing the newspapers as well as running the printing centre, churning out the latest edition every morning?”
Questions 1 – 8

Complete the flow-chart below.

Choose **NO MORE THAN THREE WORDS** from the text for each answer.

Write your answers in boxes 1-8 on your answer sheet.

**The Production Process**

1. The newspaper is compiled at the editorial headquarters by the journalists.
2. The final version of the text is **1** ............... to the printing centre.
3. The pages arrive by facsimile.
4. The pages are converted into **2** ............... .
5. **3** ............... are made for use in the printing presses.
6. The LGVs are **4** ............... by computer.
7. The LGVs collect the reels of paper.
8. The LGVs remove the **5** ............... from the reel.
9. The reel is **6** ............... .
10. The reel is trimmed and prepared by the **7** ............... .
11. The reel is taken to the press. **The reel is taken to the** **8** ............... .
London to Brighton Bike Ride

The start
The bike ride starts at Clapham Common tube station.
- Your Start Time is indicated by the colour of your body number in this pack. It is also printed on the address label of the envelope. Please arrive no earlier than 30 minutes before that time.
- We allocate an equal number of cyclists for each Start Time to ensure a steady flow. Please keep to the time you've been given so we can keep to our schedule and avoid delaying other riders and prevent 'bunching' further down the route.
- An Information Point, toilets and refreshment stands will be open from very early in the day.

Ride carefully
We put together as many facilities as possible to help ensure you have a troublefree day. But we also rely on you to ride safely and with due consideration for other cyclists and road users. Although many roads are closed to oncoming traffic, this is not always the case and you should be aware of the possibility that there could be vehicles coming in the opposite direction. Please do not attempt reckless overtaking whilst riding – remember it is NOT a race.

Follow all instructions
Every effort is made to ensure that the route is well signed and marshalled. Please obey all directions from police and marshals on the route. If you hear a motorcycle marshal blow his/her whistle three times, move left.

Wear a helmet
Every year we are delighted to see more riders wearing protective helmets, but we would like to see every cyclist on the ride wearing one. More than half of reported injuries in cycling accidents are to the head, and a helmet gives the best protection when the head hits the ground.

Attracting assistance
If you have an accident, ask a marshal for help; they are in contact with the support/emergency services. To call for help from our motorcycle marshals, give a 'thumbs down' signal. The marshal will do all he/she can to help, providing he/she is not already going to a more serious accident. If a motorcycle marshal slows down to help you, but you have just stopped for a rest and don't need help, please give a 'thumbs up' signal and he/she will carry on. Remember – thumbs down means 'I need help'.
In case of breakdown
Refer to your route map and make your way to a Mechanics Point. Mechanical assistance is free when you show your Rider Identity Card; you just pay for the parts.

Refreshment stops
Look out for these along the route. Most are organised by voluntary clubs and their prices give you real value for money. They are also raising money for their local communities and the British Heart Foundation, so please give them your support.

Rain or shine – be prepared
In the event of very bad weather, watch out for signs to wet weather stations en route. Good waterproofs, like a cycle cape, are essential. Our first aid staff can only supply bin liners and by the time you get one you may be very wet. However, the English summer is unpredictable – it may also be hot, so don't forget the sun protection cream as well!

If you have to drop out
We will try to pick up your bike for you on the day. Call Bike Events (01225 310859) no more than two weeks after the ride to arrange collection. Sorry, we cannot guarantee this service nor can we accept liability for any loss or damage to your bike. Bike Events will hold your bike for three months, after which it may be disposed of. You will be charged for all costs incurred in returning your cycle.
Do the following statements agree with the information given in the text?

In boxes 9-16 on your answer sheet, write

**TRUE** if the statement agrees with the information  
**FALSE** if the statement contradicts the information  
**NOT GIVEN** if there is no information on this

9. You should not arrive more than half an hour before your allocated starting time.

10. Your Rider Identity Card will be sent to you before the event.

11. Some roads may have normal traffic flow on them.

12. Helmets are compulsory for all participants.

13. Refreshments are free to all participants during the ride.

14. If you need a rest you must get off the road.

15. First aid staff can provide cycle capes.

16. Bike Events will charge you for the return of your bike.
Although French, German, American and British pioneers have all been credited with the invention of cinema, the British and the Germans played a relatively small role in its worldwide exploitation. It was above all the French, followed closely by the Americans, who were the most passionate exporters of the new invention, helping to start cinema in China, Japan, Latin America and Russia. In terms of artistic development it was again the French and the Americans who took the lead, though in the years before the First World War, Italy, Denmark and Russia also played a part.

In the end it was the United States that was to become, and remain, the largest single market for films. By protecting their own market and pursuing a vigorous export policy, the Americans achieved a dominant position on the world market by the start of the First World War. The centre of filmmaking had moved westwards, to Hollywood, and it was films from these new Hollywood studios that flooded onto the world’s film markets in the years after the First World War, and have done so ever since. Faced with total Hollywood domination, few film industries proved competitive. The Italian industry, which had pioneered the feature film with spectacular films like “Quo Vadis?” (1913) and “Cabiria” (1914), almost collapsed. In Scandinavia, the Swedish cinema had a brief period of glory, notably with powerful epic films and comedies. Even the French cinema found itself in a difficult position. In Europe, only Germany proved industrially capable, while in the new Soviet Union and in Japan, the development of the cinema took place in conditions of commercial isolation.

Hollywood took the lead artistically as well as industrially. Hollywood films appealed because they had better constructed narratives, their special effects were more impressive, and the star system added a new dimension to screen acting. If Hollywood did not have enough of its own resources, it had a great deal of money to buy up artists and technical innovations from Europe to ensure its continued dominance over present or future competition.

From early cinema, it was only American slapstick comedy that successfully developed in both short and feature format. However, during this ‘Silent Film’ era, animation, comedy, serials and dramatic features continued to thrive, along with factual films or documentaries, which acquired an increasing distinctiveness as the period progressed. It was also at this time that the avant-garde film first achieved commercial success, this time thanks almost exclusively to the French and the occasional German film.

Of the countries which developed and maintained distinctive national cinemas in the silent period, the most important were France, Germany and the Soviet Union. Of these, the French displayed the most continuity, in spite of the war and post-war economic uncertainties. The German cinema, relatively insignificant in the pre-war years, exploded on to the world scene after 1919. Yet even they were both overshadowed by the Soviets after the 1917 Revolution. They turned their back on the past, leaving the style of the pre-war Russian cinema to the émigrés who fled westwards to escape the Revolution.
The other countries whose cinemas changed dramatically are: Britain, which had an interesting but undistinguished history in the silent period; Italy, which had a brief moment of international fame just before the war; the Scandinavian countries, particularly Denmark, which played a role in the development of silent cinema quite out of proportion to their small population; and Japan, where a cinema developed based primarily on traditional theatrical and, to a lesser extent, other art forms and only gradually adapted to western influence.
**Questions 17 – 23**

Look at the following statements (Questions 17-23) and the list of countries below.

Match each statement with the correct country, A-J.

Write the correct letter, A-J, in boxes 17-23 on your answer sheet.

**NB** You may use any letter more than once.

17. It helped other countries develop their own film industry.
18. It was the biggest producer of films.
19. It was first to develop the ‘feature’ film.
20. It was responsible for creating stars.
21. It made the most money from 'avantgarde' films.
22. It made movies based more on its own culture than outside influences.
23. It had a great influence on silent movies, despite its size.

<table>
<thead>
<tr>
<th>List of Countries</th>
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<tbody>
<tr>
<td>A</td>
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<td>I</td>
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<tr>
<td>J</td>
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</tbody>
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Questions 24 – 29

The text has seven paragraphs, A-G.

Choose the correct heading for paragraphs A, B and D-G from the list of headings below.

Write the correct number, i-ix, in boxes 24-29 on your answer sheet.

List of Headings

i  Robots working together
ii  Preparing LGVs for takeover
iii  Looking ahead
iv  The LGVs’ main functions
v  Split location for newspaper production
vi  Newspapers superseded by technology
vii  Getting the newspaper to the printing centre
viii  Controlling the robots
ix  Beware of robots!

24  Paragraph A
25  Paragraph B

Example

Paragraph C  ix

26  Paragraph D
27  Paragraph E
28  Paragraph F
29  Paragraph G
The newspaper production process has come a long way from the old days when the paper was written, edited, typeset and ultimately printed in one building with the journalists working on the upper floors and the printing presses going on the ground floor. These days the editor, subeditors and journalists who put the paper together are likely to find themselves in a totally different building or maybe even in a different city. This is the situation which now prevails in Sydney. The daily paper is compiled at the editorial headquarters, known as the prepress centre, in the heart of the city, but printed far away in the suburbs at the printing centre. Here human beings are in the minority as much of the work is done by automated machines controlled by computers.

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Questions 30 – 38

Look at the five advertisements, A-E.

Which advertisement mentions the following?

Write the correct letter, A-E, in boxes 30-38 on your answer sheet.

NB You may use any letter more than once.

30 up-to-date teaching systems
31 that the institution has been established for a significant time
32 examination classes
33 that arrangements can be made for activities outside class
34 the availability of courses for school students
35 language teaching for special purposes
36 a wide variety of language choices
37 evening classes
A

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B

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C

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Situated on the beautiful Swan River, Perth offers you...
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• every sport imaginable
• multicultural society
• government owned TAFE Colleges
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• maximum flexibility
• hostel or homestay accommodation

Intensive English Courses Available
• 5 intakes per year
• 10 week modules
• multicultural classes
• optional programs
• Cost: $2000 AUD per 10 weeks

Study Tours Available
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WE PLAN THE PROGRAM TO SUIT YOUR NEEDS

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Perth 6000, Western Australia
Telephone: 619 320 3777

D

French
SUMMER COURSES
January 2005

Adults Crash Course 9-19 Jan
Intensive 3 or 4 hrs a day, morning or evening, 30 hrs $250
(Beginners and Low Intermediate only)

Adults Normal Course 9 Jan–4 March
10 levels from Beginner to Advanced
Twice a week - 2 hrs morning or evening
Once a week, Saturday 9am-1.30pm 32hrs $278

High School Crash Course 11-25 Jan
Intensive 3 hrs a day, 1pm-4pm
Years 8 to 12 24hrs $200
Starts Wednesday 11.1.97

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27 Claire St, Sydney, Phone 227 1746

E

UNIVERSITY OF CANBERRA
Learn English in Australia's National Capital

* The TESOL Centre has more than 24 years' experience in providing quality language programs for overseas students
* Test preparation, possibility of further academic study
* Access to University facilities
* Classes conducted on campus with opportunity to mix with Australian students
At first, von Frisch thought the bees were responding only to the scent of the food. But what did the third dance mean? And if bees were responding only to the scent, how could they also ‘sniff down’ food hundreds of metres away from the hive*, food which was sometimes downwind? On a hunch, he started gradually moving the feeding dish further and further away and noticed as he did so that the dances of the returning scout bees also started changing. If he placed the feeding dish over nine metres away, the second type of dance, the sickle version, came into play. But once he moved it past 36 metres, the scouts would then start dancing the third, quite different, waggle dance.

The measurement of the actual distance too, he concluded, was precise. For example, a feeding dish 300 metres away was indicated by 15 complete runs through the pattern in 30 seconds. When the dish was moved to 60 metres away, the number dropped to eleven.

Von Frisch noted something further. When the scout bees came home to tell their sisters about the food source, sometimes they would dance outside on the horizontal entrance platform of the hive, and sometimes on the vertical wall inside. And, depending on where they danced, the straight portion of the waggle dance would point in different directions. The outside dance was fairly easy to decode: the straight portion of the dance pointed directly to the food source, so the bees would merely have to decode the distance message and fly off in that direction to find their food.

But by studying the dance on the inner wall of the hive, von Frisch discovered a remarkable method which the dancer used to tell her sisters the direction of the food in relation to the sun. When inside the hive, the dancer cannot use the sun, so she uses gravity instead. The direction of the sun is represented by the top of the hive wall. If she runs straight up, this means that the feeding place is in the same direction as the sun. However, if, for example, the feeding place is 40º to the left of the sun, then the dancer would run 40º to the left of the vertical line. This was to be the first of von Frisch’s remarkable discoveries. Soon he would also discover a number of other remarkable facts about how bees communicate and, in doing so, revolutionise the study of animal behaviour generally.

* Hive – a ‘house’ for bees; the place where they build a nest and live
Questions 38 – 40

Complete the sentences below.

Choose **NO MORE THAN TWO WORDS** from the text for each answer.

Write your answers in boxes 38-40 on your answer sheet.

38  Von Frisch discovered the difference between dance types by changing the position of the ................. .

39  The dance outside the hive points in the direction of the ................. .

40  The angle of the dance from the vertical shows the angle of the food from the ................. .
General Training Reading sample task – Short-answer questions

Questions 4 – 8

Answer the questions below.

Choose NO MORE THAN THREE WORDS AND/OR A NUMBER from the text for each answer.

Write your answers in boxes 4-8 on your answer sheet.

4 What has been found in some Fancy Foods products?

5 Where can you find the batch number on the jars?

6 How much will you receive for an opened jar of contaminated Chicken Curry?

7 If you have eaten Chicken Curry from a jar with one of the batch numbers listed, whom should you contact?

8 What is the maximum reward Fancy Foods is offering for information about who contaminated their product?

IMPORTANT NOTICE: PRODUCT RETURN

Fancy Foods wishes to inform the public that pieces of metal have been found in some jars of Fancy Foods Chicken Curry (Spicy). The batches of the jars involved have numbers from J6617 to J6624. The batch number is printed on the bottom of each jar.

If you have any jars with these batch numbers, please return them (preferably unopened) to the supermarket where you purchased them. You can also return them to the factory (Fancy Foods Retailers, Blacktown). Fancy Foods will pay $10 for each jar returned unopened and $5 for each jar already opened.

No payment will be made for empty jars, which do not need to be returned. However, the Retailing Manager will be interested to hear from people who have consumed chicken curry from any of the above batch numbers. In particular, it will be helpful if they can give information about the place of purchase of the product.

Jars of Fancy Foods Chicken Curry (Coconut) and Fancy Foods Chicken Curry (Mango) have not been affected and do not need to be returned.

REWARD

Fancy Foods will pay a reward of $10,000 to $50,000 for information which leads to the conviction of any person found guilty of placing metal pieces in its products. If you have such information, please contact the Customer Relations Manager, Fancy Foods Retailers, Blacktown.
General Training Reading sample task – Flow-chart completion

Answers

1 transmitted (electronically)
2 (photographic) film/negative(s)
3 (aluminium) printing plates
4 programmed
5 damaged paper/wrapping
6 weighed
7 pasteur robot(s)
8 storage area

Words in brackets are optional - they are correct, but not necessary. Alternative answers are separated by a slash (/).
Answers

9    TRUE
10   NOT GIVEN
11   TRUE
12   FALSE
13   FALSE
14   NOT GIVEN
15   FALSE
16   TRUE
General Training Reading sample task – Matching features

**Answers**

17. A  
18. C  
19. H  
20. C  
21. A  
22. F  
23. D
General Training Reading sample task – Matching headings

Answers

24   v
25   vii
26   iv
27   i
28   viii
29   iii
General Training Reading sample task – Sentence completion

Answers

38 feeding dish
39 food (source)
40 sun

*Words in brackets are optional - they are correct, but not necessary.*
General Training Reading sample task – Short-answer questions

Answers

4 pieces of metal
5 (on) the bottom
6 $5
7 (the) Retailing Manager
8 $50,000

Words in brackets are optional - they are correct, but not necessary.