

UFVJM  
FACET – DECOM – SISTEMAS DE INFORMAÇÃO  
INGLÊS INSTRUMENTAL  
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ALUNO(A): \_\_\_\_\_  
DATA: \_\_\_/\_\_\_/\_\_\_

### NOMINAL GROUPS

Textos e questões extraídos de:  
<http://www.cienciamao.if.usp.br/dados/pru/ingles-modulo2.apostila.pdf>  
<http://web2.uvcs.uvic.ca/elc/studyzone/330/grammar/simcon1.htm>

#### ISRAELIS KILL 18 IN CAMP RAID

ISRAELI helicopters pounded a Gaza Strip refugee camp with missiles and machine gun fire yesterday, killing at least 18 Palestinians in an offensive that drew worldwide condemnation.

1. Em que seção de um jornal você encontraria esse texto?
  - a. ( ) Notícias nacionais
  - b. ( ) Notícias internacionais
  - c. ( ) Notícias esportivas
2. Qual o assunto principal do texto?
  - a. ( ) Um ataque de tropas israelenses em um campo de refugiados palestinos.
  - b. ( ) Um ataque de tropas palestinas em um campo de refugiados israelenses.
  - c. ( ) Um ataque de tropas israelenses em um campo de concentração de palestinos.
3. Qual o significado dos grupos nominais presentes no texto?
  - a. Israeli helicopters:
  - b. Gaza Strip refugee camp:
  - c. machine gun fire:
  - d. world wide condemnation:

#### PUB SMOKE ALL-CLEAR

It might seem like an obvious conclusion, but a study has revealed that ventilation in pubs can dramatically reduce the smoky atmosphere.

Researchers from the University of Glamorgan tested the air quality of The Doublet bar in Glasgow.

They found the amount of gases and particles could be cut by 90 per cent through the use of an effective ventilation system.

4. Em que seção de jornal você encontraria esse texto?

- a. ( ) Notícias políticas
- b. ( ) Notícias científicas
- c. ( ) Notícias esportivas

5. Qual o assunto principal do texto?

- a. ( ) Poluição atmosférica em Glasgow provocada pela fumaça de bares.
- b. ( ) O efeito de sistemas de ventilação no ambiente de bares em Glasgow.
- c. ( ) A quantidade de gases e partículas encontradas no ambiente de bares em Glasgow.

6. Qual o significado dos grupos nominais presentes no texto?

- a. An obvious conclusion:
- b. The smoke atmosphere:
- c. The air quality of the Doublet bar in Glasgow:
- d. The amount of gases and particles:
- e. The use of an effective ventilation system:

Imagine Joseph Paxton's Great Victorian Way in Sydenham, a 10-mile stretch of glass and brightly painted iron arcades with its own snaking elevated railway. Or a National Cemetery on Primrose Hill, London's answer to Paris's Père Lachaise. Or Hyde Park Corner with a huge art deco music hall. Or White City with a vast expressionist towerscape designed by the German visionary Eric Mendelsohn. If architects' imaginings had become reality, London could have been a completely different place.



Dream design: FAT's Princess Diana bridge.  
Picture courtesy of Hayward Gallery

The game of what-ifs in architecture is addictive. The organisers of a new Hayward Gallery touring exhibition had the brilliant idea of exploring the never-never land of building, drawing on the collections of the Royal Institute of British Architects and the Victoria and Albert museum. So many of these visions are a great deal more exciting than the buildings we actually got. In Liverpool, instead of Paddy's wigwam and Gibberd's gimcrack (and now sadly deteriorating) Roman Catholic cathedral, we might have had the grand and wonderful Metropolitan Cathedral of Christ the King by Lutyens. In the Strand, instead of George Edmund Street's relatively makeshift Law Courts, we could have had Alfred Waterhouse's much more ambitious and romantic urban concept: a magnificent assembly of pitched roofs, towers and walkways, Turneresque in its drama when viewed across the Thames. Waterhouse's courts fell foul of the Victorian competition system. The designs remain to haunt us.

Source: *The Guardian on the Web* / April 15, 2004.

7. In what section of a newspaper would you find the article above?

- a.  Entertainment news
- b.  Travel news
- c.  Business news
- d.  Editorials
- e.  Letters from readers

8. The article is mainly about

- a.  famous artists in England.
- b.  famous places in England.
- c.  an art exhibition in England.
- d.  architectural styles in England.
- e.  the Victorian period in England.

9. According to the article,

- a.  the Roman Catholic Cathedral in Liverpool is still in a good condition.
- b.  the buildings found in the capital of England are not as exciting as architects' imaginings.
- c.  London is not a completely different place because the architects' visions became reality.
- d.  Alfred Waterhouse's urban concept would not be suitable in the place of the Law Courts.
- e.  the architects' visions are impossible to become reality because of the economic crisis in England.

## Intelligent vehicle can detect pedestrians at nighttime

May 5, 2014

Universidad Carlos III de Madrid - Oficina de Información Científica



Intelligent  
vehicle.

*Credit: Image courtesy of Universidad Carlos III de Madrid - Oficina de Información Científica*

**Date:** **Source:** Researchers at Universidad Carlos III de Madrid (UC3M) have designed a new pedestrian detection system for cars which works in low visibility conditions; the system is made up of infrared cameras which capture body heat.

The new driving-aid system uses images captured by far infrared with two thermal cameras to identify the presence of individuals in their field of vision. The objective is to alert the driver to the presence of pedestrians in the path of the vehicle, and even, in the case of cars with automated systems, actually stop the vehicle. "With the model being used in our research, pedestrians up to 40 meters away can be detected, although this distance could be extended if we substitute the lens with one that has greater focus range," explained one of its designers, Daniel Olmeda, from the Intelligent Systems Laboratory (LSI) at UC3M.

The use of this type of sensors provides the driver with information that goes beyond what he himself might perceive, something particularly useful in low visibility conditions such as nighttime driving. "In this situation, the sensitive cameras in the visible spectrum, which are already incorporated into some vehicles, can only be utilized in regions illuminated by the car's headlights. But our system does not require any type of external lighting," the engineer asserted. The infrared range in which it operates corresponds to the emission of heat which allows it to obtain images in conditions of total darkness.

The functioning of the system, explained in a recent scientific article published in the journal *Integrated Computer-Aided Engineering*, is based on new techniques of image pattern recognition. "The algorithm developed detects pedestrian presence according to certain silhouette features, because we have confirmed that the contour of objects in infrared images have congruent phase features that do not vary with temperature and contrasting," noted professor Olmeda, who is focusing his doctoral thesis on this technology.

### **Commercial viability**

This type of device could be easily installed in a commercial vehicle. In fact, car models already exist that incorporate cameras in the visible spectrum and "integration of a system based on far infrared would not be very different," according to the researchers. The system has been developed and tested on an IVVI 2.0 (Intelligent Vehicle based on Visual Information) at UC3M. Specifically, they use a type of infrared sensor, the non-refrigerated microbolometer, which has gotten the same results as other more costly refrigerated sensors. "Generalized implementation of this type of sensors is viable and its mass production would lower production costs," Olmeda pointed out.

The IVVI 2.0, an actual car that has become a platform for research and experimentation for University faculty and students, also incorporates other artificial vision systems that allow it detect other vehicles and highway lines, read traffic signals, alert the driver with a sound if he starts to fall asleep, and warn of any driving danger. Notwithstanding, the interface for this type of systems still presents a challenge, according to the LSI coordinator, Arturo de la Escalera, professor at the Automated Systems Engineering Department. "It is important to study how to get this information to the driver," because we need to avoid the distractions that an alarm or a screen could present while at the wheel. "We are working to join external perceptions with internal ones so that the system knows if the driver has not seen something, and we only warn him about this obstacle," he elaborated.

This new generation of detectors can also have applications in the field of robotics, according to the scientists. This study is funded by the projects FEDORA from the Comisión Interministerial de Ciencia y Tecnología (CICYT)(Interministerial Science and Technology Research Commission) and by the SEGVAUTO program of the Consejería de Educación,

Juventud y Deporte (Council of Youth Sports and New Technologies) of the Autonomous Region of Madrid, which includes researchers from five Spanish university and representatives from the main automobile production factories in operation in Spain.

**Story Source:**

The above story is based on [materials](#) provided by **Universidad Carlos III de Madrid - Oficina de Información Científica**. *Note: Materials may be edited for content and length.*

**Journal Reference:**

1. Daniel Olmeda, Cristiano Premebida, Urbano Nunes, José María Armingol and Arturo de la Escalera. **Pedestrian detection in far infrared images**. *Integrated Computer-Aided Engineering*, Volume: 20. Number: 4. Pages: 347-360 DOI: [10.3233/ICA-130441](https://doi.org/10.3233/ICA-130441)

10- Escreva, com suas palavras, o que revela o artigo acima.

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11- Destaque 5 grupos nominais e faça a tradução de cada um deles.