

NEW TECHNOLOGIES

- **examples:**

CLIMATE CHANGE:

- Green hydrogen : for fuel, to replace polluting energy but not as efficient as expected and dangerous (explosive)
- Electric cars : no carbon emissions but still polluting (rare earth materials)
- Offshore solar panels
- Singapore authorised the sale of **laboratory meat** that is to say made from animal cells. It could be a solution for climate change and for vegans, a solution against animal abuse. But it could be a real danger for breeders, they could lose their job. It also could be a danger for the health of consumers if there is no real control.

SURVEILLANCE:

- The UK police use of computer programs to predict crime sparks discrimination warning. This computer programs can predict and identifying an area where a crime is more likely to be committed by potential criminals. It is based on already-existing data provided by the police. It is supposed to be efficient cost-effective. However, it is biased, untrustworthy and perpetrates discrimination. It invades privacy and it hinders free speech.
- Facial recognition technologies have seen significant progress and are used for security and ad targeting purposes. In the UK police have over 20 million database faces to improve the safety of their population. This can be seen negatively because of the invasion of privacy. Also because there is no legislative framework and it could undermine trust in the police.

EMPLOYMENT:

→ Unskilled jobs will be endangered by the increase of automation. Automation implies less need of employees and reduce then the face-to-face interactions (delivery services, pizza distributor, supermarket distributor) + (the massive redundancy in Airbus company during the lockdown)

MEDICINE : The development of many medical apps :

Doctolib,
Apple watch monitors the heart rate,
Alexa can detect if we have covid-19 just by listening our cough ,
Nurses use an app to collect patients' data to communicate quickly and directly
=> The new technology has largely replaced old paper observation charts with digital medicine . (It makes it easier and quicker)

Artificial Intelligence: innovations

Facebook has developed glasses for facial recognition it can simplify the job for police to track people who can represent a danger for the population, but it can also represent a breach of people's privacy.

A new AI model developed by the Massachusetts Institute of Technology (MIT) permits to predict whether a person is at risk of developing breast cancer in the next five years by detecting changes in breast tissue.

3D PRINTERS:

There is no regulation to control what we can print: everyone can print their own weapon and can represent a danger for others.

Aectual is a start-up specializing in the printing of buildings and furniture from ecological and reusable materials.

- ***problématiques:***

Should scientific research be restricted in any way?

Is the use of big data an improvement of our societies ?

Is the growing dominance of Tech Giants beneficial ? Do you think the influence of the Tech Giants should be limited ?

Should we fear the development of digitalization in health care ?

Are innovation and new technologies good solutions to tackle the climate crisis ? Is technology a solution to the climate crisis ?

- **Vocabulaire:**

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|---|---|
| - digitization: numérisation | - computer science :l'informatique |
| - digital technology : le numérique | |
| - to computerize : informatiser | - a chip : une puce électronique |
| - ROM / RAM : la mémoire morte/vive données | - a database : une base de données |
| - to hack into a system : s'introduire dans une système données | - to process data : traiter des données |
| - to upload : télécharger (vers un serveur) | |
| - information technology, IT : l'informatique | |
| - facial recognition : reconnaissance faciale internet | - to surf the net : aller sur internet |

- to restrict internet access : limiter l'accès à internet
l'hameçonnage

- phishing :

- a patent : un brevet

cyberdefence:la cybergdéfence

- copyrights : les droits d'auteur

- to infringe on sb's rights : porter atteinte aux droits de quelqu'un

- to track sb down : traquer, localiser qqn

- a security breach : une atteinte à la sécurité