QUESTION 1 /20 → Ramenée sur 7

QUESTION 2 /20 → Ramenée sur 13

#### MINES-PONTS – GOLDEN RULES

## Q1

- Pas de commentaire personnel
- Pas d'intro/conclusion/paragraphes
- Inutile d'écrire <u>"The journalist says"/"According to the journalist"</u>
- Pas un résumé
- Reformuler

EXPRESSION ECRITE (Q1/Q2/SYNTHESE)



The robots are coming! In science fiction that is usually an ominous warning. In the real world, it is a prediction and a welcome one. The field of robotics has made impressive progress in the past year, as researchers in universities and industry have applied advances in artificial intelligence (AI) to machines. The same technology that enables chatbots like ChatGPT to hold conversations, or systems like dall-e to create realistic-looking images from text descriptions, can give robots of all kinds a dramatic brain upgrade.

<mark>Robots can inspire fear.</mark> Human beings are trained from birth by Hollywood to be afraid of them. Nevertheless, the latest advances in robotics will bring real and substantial benefits.

One is that new "multimodal" AI models combine understanding of language and vision with data from robotic sensors and actuators. This makes it possible to deal with robots using ordinary words. You can ask a robot what it is able to see or tell it to "pick up the yellow fruit". Such models in effect grant robots a degree of common sense—in this case, knowing that a nearby banana is a kind of yellow fruit. And like a chatbot, a robot can be told to modify its behaviour simply by changing a text prompt, something that would previously have required elaborate reprogramming.

Another benefit is that the new models enable robots to explain the reasoning behind their actions. That is useful when they behave in unexpected or unwelcome ways. So long as robots' brains are not inscrutable black boxes, programming and debugging them is fairly straightforward. The new models are also less likely to hallucinate—tech-speak for "make things up"—because their perception is grounded in observations of the world, and they aim to ensure that cognitive and physical reality match. That makes them safer and more reliable.

And one more benefit is that robots are getting better at learning quickly through imitation and at generalising from one skill to another. This opens the door for robots to move out of factories and warehouses. Labour markets across the rich world are tight—and getting tighter as societies age. As well as boosting productivity while workforces shrink, more capable robots could cook and clean, and care for the aged and the needy.

Advanced economies will need more automation if they are to maintain their standards of living. South Korea, Japan and China are all in the top five countries with the most robots for each manufacturing worker. It is no coincidence that they are also ageing rapidly. Without robots to help out, more people may have to work longer and retire later. In the coming years, attitudes could well flip from fearing the arrival of robots to wishing that they would get here sooner.

Adapted from The Economist, Jun 6th 2024

1) According to the journalist, what are the latest advances in robotics and to what extent can they be considered good news?

# Three reasons why it's good news that robots are getting smarter

They are becoming more capable, easier to program and better at explaining themselves

- 1) Robots are more capable
- 2) Explain themselves better
- 3) Easier to communicate with them (& program them)

to what extent can they be considered good news?

There are three reasons not to be afraid of robots. First, recent advances have made robots more **discerning**<sup>1</sup> since they can process and understand simple language, which also makes them easier to **fine-tune**<sup>2</sup>. Meanwhile, robots can better explain themselves **and bring virtual and actual reality into line**<sup>3</sup>. Being more **dependable**<sup>4</sup>, they can now coexist with humans, and using them in real life is becoming conceivable. They could even substitute for older workers or take care of ageing populations. Therefore, the rise of robots should **definitely**<sup>5</sup> be welcomed.

<sup>&</sup>lt;sup>1</sup> Discerning =

<sup>&</sup>lt;sup>2</sup> To fine-tune =

<sup>&</sup>lt;sup>3</sup> To bring into line =

<sup>&</sup>lt;sup>4</sup> Dependable =

<sup>&</sup>lt;sup>5</sup> Definitely :

#### Vocabulary:

- Souligner / mettre l'accent sur = to \_\_\_\_\_light
- C'est une bonne nouvelle = This is \_\_\_\_\_

#### Fix the mistakes :

- \*The robot's fear
- \*Human's faculties
- \*Robot's using

Q2

- INTRODUCTION (courte)
  - $\circ \ \text{Accroche}$
  - o Problématique
  - $_{\circ}$   $\bigcirc$  Interdit de recopier la question  $\bigcirc$
- PARAGRAPHES (avec exemples)
- CONCLUSION

Introduction : Nowadays, robots are everywhere so we can wonder if they are dangerous.

First, robots can be useful.....

However, it may be going too far......

Conclusion : We have to be careful.



2. In your opinion, to what extent should humans be afraid of robots? Support your arguments with examples. (180 words  $\pm 10\%$ )

- $\neq$  Are robots dangerous?
- $\neq$  The pros and cons of robots
- $\neq$  Is AI good or bad?

#### ROBOT

a machine resembling a human being and able to replicate certain human movements and functions automatically.

a machine capable of carrying out a complex series of actions automatically, especially one programmable by a computer.

#### ISAAC ASIMOV's three laws :

"(1) a robot may not injure a human being or, through inaction, allow a human being to come to harm;

(2) a robot must obey the orders given it by human beings except where such orders would conflict with the First Law;

(3) a robot must protect its own existence as long as such protection does not conflict with the First or Second Law."

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To what extent should humans be afraid of robots?

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Should humans be afraid of robots?

## Problématiques

Faut-il faire une confiance aveugle aux robots ?

Does this mean robots should be trusted blindly?

Robots bring progress and excitement but does the red line not lie with AI?

Should humans fear robots or those who control them?

### CONCLUSIONS

- It can be dangerous but it is okay if it is used well $\stackrel{\scriptstyle{\otimes}}{\displaystyle{\otimes}}$
- Even if it may be dangerous, it is good 12
- We have to be careful I

- Humans should not be afraid for now.
- It is not robots but the humans who created them that are frightening
- Robots have to be seen as a threat, while hoping that the danger never materialises.



Radio:

In 1936, music magazine *Gramophone* lamented the arrival of radio : "At night the children often lie awake in bed restless and fearful, or wake up screaming as a result of nightmares brought on by mystery stories."

- Books & the printed press: a Swiss biologist in the 16th century felt it would lead to information overload.
- Writing: Socrates thought it would result in peoples' memories getting worse. In <u>his own words</u>, "This discovery of yours will create forgetfulness in the learners' souls, because they will not use their memories; they will trust to the external written characters and not remember of themselves."

1- In recent years, the development of AI in robotics has	1- Accroche (≠ "Nowadays")
been dramatic. 2- But it remains unclear whether this	2- Problématique : les craintes ne sont-
could be a dangerous slippery slope to a sci-fi like robot	elles pas disproportionnées ?
uprising.	
Robots have already been used in healthcare for	Robots are used in specific domains.
instance. The Da Vinci Surgical System is a robotic	Example : surgery
platform that allows surgeons to perform complex	
surgery with greater accuracy, resulting in faster recovery	
times. Beyond specific uses, as technology advances,	It can be extended to everyone's daily
working together to aphieve common goals is set to	life (≠ also / moreover)
become a reality breaking down the last barriers to the	
widespread use of robots in everyday life	
However, mankind should be extremely cautious.	This does not mean there is no danger.
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