

**Agrégation interne d'anglais**

**Session 2017**

**Épreuve EPC**

**Exposé de la préparation  
d'un cours**

**EPC  
450**

Ce sujet comprend 4 documents :

- Document 1 : Abigail Beall, "Stephen Hawking warns of a robotic uprising", *MailOnline*, July 1, 2016
- Document 2 : Isaac Asimov, "Reason", *Astounding Science Fiction*, 1941
- Document 3 : Video, "Elli-Q The active Aging Companion", Intuition Robotics company, 2016
- Document 4 : Photograph by Franz Steiner, *Personal Robot*, 2017

Compte tenu des caractéristiques de ce dossier et des différentes possibilités d'exploitation qu'il offre, vous indiquerez à quel niveau d'apprentissage vous pourriez le destiner et quels objectifs vous vous fixeriez. Vous présenterez et justifierez votre démarche pour atteindre ces objectifs.

**Document 1** : Abigail Beall, "Stephen Hawking warns of a robotic uprising", *MailOnline*, July 1, 2016

### **STEPHEN HAWKING WARNS OF A ROBOTIC UPRISING**

A sinister threat is brewing deep inside the technology laboratories of Silicon Valley, according to Professor Stephen Hawking.

Artificial Intelligence, disguised as helpful digital assistants and self-driving vehicles, is gaining a foothold, and it could one day spell the end for mankind.

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On the Larry King Now show, Professor Hawking spoke of his fears about the future of the human race.

'I don't think advances in artificial intelligence will necessarily be benign,' Professor Hawking said. The physicist has previously been outspoken on his beliefs.

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Professor Hawking was interviewed from the Canary Islands, where he was being honored at the 'Starmus' Festival, aimed at making science accessible to the public.

'Once machines reach a critical stage of being able to evolve themselves we cannot predict whether their goals will be the same as ours.'

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'Artificial intelligence has the potential to evolve faster than the human race.'

**Document 2** : Isaac Asimov, "Reason", *Astounding Science Fiction*, 1941

"I have spent these last two days in concentrated introspection," said Cutie, "and the results have been most interesting. I began at the one sure assumption I felt permitted to make. I, myself, exist, because I think--"

5 Powell groaned, "Oh, Jupiter, a robot Descartes!"

"Who's Descartes?" demanded Donovan. "Listen, do we have to sit here and listen to this metal maniac--"

"Keep quiet, Mike!"

10 Cutie continued imperturbably, "And the question that immediately arose was: Just what is the cause of my existence?"

Powell's jaw set lumpily. "You're being foolish. I told you already that we made you."

"And if you don't believe us," added Donovan, "we'll gladly take you apart!"

15 The robot spread his strong hands in a deprecatory gesture, "I accept nothing on authority. A hypothesis must be backed by reason, or else it is worthless - and it goes against all the dictates of logic to suppose that you made me."

Powell dropped a restraining arm upon Donovan's suddenly bunched fist.

20 "Just why do you say that?"

Cutie laughed. It was a very inhuman laugh - the most machine-like utterance he had yet given vent to. It was sharp and explosive, as regular as a metronome and as uninflected.

25 "Look at you," he said finally. "I say this in no spirit of contempt, but look at you! The material you are made of is soft and flabby, lacking endurance and strength, depending for energy upon the inefficient oxidation of organic material - like that." He pointed a disapproving finger at what remained of Donovan's sandwich. "Periodically you pass into a coma and the least variation in temperature, air pressure, humidity, or radiation intensity impairs your efficiency. You are makeshift.

30 "I, on the other hand, am a finished product. I absorb electrical energy directly and utilize it with an almost one hundred percent efficiency. I am composed of strong metal, am continuously conscious, and can stand extremes of environment easily. These are facts which, with the self-evident proposition that no being can create another being superior to itself, smashes your silly hypothesis to nothing."

Donovan's muttered curses rose into intelligibility as he sprang to his feet, rusty eyebrows drawn low. "All right, you son of a hunk of iron ore, if we didn't make you, who did?"

40 Cutie nodded gravely. "Very good, Donovan. That was indeed the next question. Evidently my creator must be more powerful than myself and so there was only one possibility."

45 The Earthmen looked blank and Cutie continued, "What is the center of activities here in the station? What do we all serve? What absorbs all our attention?" He waited expectantly.

Donovan turned a startled look upon his companion. "I'll bet this tinplated screwball is talking about the Energy Converter itself."

"Is that right, Cutie?" grinned Powell.

"I am talking about the Master," came the cold, sharp answer.

50 It was the signal for a roar of laughter from Donovan, and Powell himself dissolved into a half-suppressed giggle.

Cutie had risen to his feet and his gleaming eyes passed from one Earthman to the other. "It is so just the same and I don't wonder that you refuse to believe. You two are not long to stay here, I'm sure. Powell himself said that at first only men served the Master; that there followed robots for the routine work; and, finally, myself for the executive labor. The facts are no doubt true, but the explanation entirely illogical. Do you want the truth behind it all?"

55 "Go ahead, Cutie. You're amusing."

60 "The Master created humans first as the lowest type, most easily formed. Gradually, he replaced them by robots, the next higher step, and finally he created me to take the place of the last humans. From now on, I serve the Master."

65 "You'll do nothing of the sort," said Powell sharply. "You'll follow our orders and keep quiet, until we're satisfied that you can run the Converter. Get that! The Converter - not the Master. If you don't satisfy us, you will be dismantled. And now - if you don't mind - you can leave. And take this data with you and file it properly."

70 Cutie accepted the graphs handed him and left without another word. Donovan leaned back heavily in his chair and shoved thick fingers through his hair.

"There's going to be trouble with that robot. He's pure nuts!"

**Document 3** : Video, "Elli-Q The active Aging Companion", Intuition Robotics company, 2016

Source: <https://www.intuitionrobotics.com/ellig/>

Document vidéo (1'58") à consulter sur la tablette multimédia fournie.

**Document 4** : Photograph by Franz Steiner, *Personal Robot*, 2017 (digital artwork based on CGI [computer-generated imagery] technique)

Source : <http://www.steiner-creative.com/#page2>

Document également consultable sur la tablette multimédia fournie.

