



Challenges of the 21st Century 二十一世紀的挑戰



What is the biggest challenge human beings are going to confront in the 21st century? Many people think it could be climate change, nuclear war, terrorism or the disruptive force of artificial intelligence. Yuval Noah Harari, a world-renowned historian and the author of bestsellers “Sapiens” and “Homo Deus,” proposed that the greatest challenge to humanity in the 21st century is when the combination of information technology and biotechnology takes precedence over humanism and shakes the foundation of human civilization.

二十一世紀人類面臨的最大挑戰是什麼？許多人認為可能是氣候變遷、核子戰爭、恐怖主義，或人工智慧科技帶來的顛覆力量。知名歷史學家哈拉瑞，也是《人類大歷史》與《人類大命運》這兩本暢銷書的作者主張，在二十一世紀，人類面臨的最大挑戰是，資訊科技與生物科技的結合凌駕於人文主義之上，進而動搖人類文明的基礎。

Word Bank (字彙表)

1. confront (v.) 面臨
2. humanism (n.) 人文主義
3. disruptive (adj.) 破壞的
4. world-renowned (adj.) 知名的
5. take precedence over (v. phrase) 優先於
6. civilization (n.) 文明





In a recent speech, Professor Harari mentioned that in the 20th century, humanism is the basis of almost everything. He explained that humanism means the “authority” of every decision we make is within us and it is the practice of “listening to our true self or following our heart.” For example, in politics, voters cast their ballots based on how they feel about a certain political candidate or a political issue. In business, the value that customers are always



right is humanistic. In education, the humanistic approach is to teach students how to think independently.

在最近一場演講中，哈拉瑞教授提到，在二十世紀，人文主義幾乎是一切的基礎。他指出，所謂的人文主義是，我們所做的每項決定主要依據自己內心的「權威」。體現到行為指的是，我們會「聆聽自己真正的心聲」來行事。舉例來說，在政治上，選民會依照自己對於某位候選人或某項政治議題的感覺來投票。在商業上，人文主義的價值就是「顧客永遠是對的」。在教育上，人文主義的教育就是教導學生如何獨立思考。

Word Bank (字彙表)

7. ultimate (adj.) 終極的
8. ballot (n.) 選票
9. emergence (n.) 出現
10. algorithm (n.) 演算法
11. penetrate (v.) 滲透
12. dictatorship (n.) 專制；獨裁
13. fundamental (adj.) 根本的
14. ponder (v.) 仔細考慮
15. manipulate (v.) 操控

However, with the emergence of biotechnology and information technology, we have less “free will” than we think. Many of us do not realize that a lot of decisions that we make are affected, to an increasing extent, by the power of algorithm, which penetrates almost every aspect of our life. For instance, the algorithm behind Facebook’s advertisements or Amazon’s recommended books can now predict what we might want to buy or read, and the prediction is getting more accurate.





Professor Harari suggested that technology may know us better than we know ourselves. This is not necessarily a bad thing in terms of saving us more time and efforts or bringing us more convenience. Problems arise when algorithm and AI are controlled by a few elites, not to the advantage of general people but to their own benefits. This is what Professor Harari called the rise of “digital

dictatorship,” in which context the fundamental values of humanity like freedom and equality are threatened. At the end of the speech, he raised a question worth pondering, “how do you follow your heart when your heart has been constantly monitored and manipulated?” This is certainly the challenge human beings are going to face in the near future.

然而，隨著生物科技與資訊科技興起，我們擁有的「自由意志」其實沒有想像得多。許多人並不知道，自己所做的決定愈來愈受到演算法的力量支配，而演算法已深入我們生活各個層面。譬如，臉書的廣告或亞馬遜書店的推薦書籍背後的演算法，可以預測我們會想買的產品或想閱讀的書籍，而且愈來愈精準。哈拉瑞教授指出，科技可能比我們自己還瞭解我們。若科技可以為我們節省時間與力氣，並帶來便利，那不全然是件壞事。然而，當演算法和人工智慧被少數菁英掌控，且為追求自身利益而用，而非為眾人謀福祉時，就會產生問題。這就是哈拉瑞教授所說的「數位獨裁」的興起。在數位獨裁的體制下，「自由」與「平等」等人類基本價值都會受到威脅。演講最後，哈拉瑞教授提出一個值得深思的問題：「當你的心不斷受到監控和操控時，要如何聽從自己的心聲呢？」這即是人類在不久的未來即將面對的挑戰。

◎資料來源 <https://www.youtube.com/watch?v=FSloTpkHYYI>

◎圖片來源

(1) <https://www.ynharari.com/publications/>

(2) <http://www-old.narlabs.org.tw/tw/research/stpolicy.php>

(3) <http://www.manpingou.com/dongmantexiao/shiliangrenwu/13978.html>

(4) <http://www.1sucai.com/tupian/137204.html>

◎應用外語系 丘羽先老師 編譯