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ECOLES NORMALES SUPERIEURES

CONCOURS D'ADMISSION 2022

MERCREDI 27 AVRIL 2022
14h00 - 18h00

FILIERES MP-PC-PSI
Epreuve n° 6
ANGLAIS   (XEULSR)

Durée totale de l'épreuve écrite de langue vivante (A+B) : 4 heures

L'utilisation de dictionnaire et traductrice n'est pas autorisée pour cette épreuve.

PREMIÈRE PARTIE (A)
SYNTHÈSE DE DOCUMENTS

Contenu du dossier : trois articles et un document iconographique pour chaque langue. Les documents sont numérotés 1, 2, 3 et 4.
Sans paraphraser les documents proposés dans le dossier, le candidat réalisera une synthèse de celui-ci, en mettant clairement en valeur ses principaux enseignements et enjeux dans le contexte de l'aire géographique de la langue choisie, et en prenant soin de n'ajouter aucun commentaire personnel à sa composition.
La synthèse proposée devra comprendre entre 600 et 675 mots et sera rédigée intégralement dans la langue choisie. Elle sera en outre obligatoirement précédée d'un titre proposé par le candidat.

SECONDE PARTIE (B)
TEXTE D'OPINION

En réagissant aux arguments exprimés dans cet éditorial (document numéroté 5), le candidat rédigera lui-même dans la langue choisie un texte d'opinion d'une longueur de 500 à 600 mots.

A. Document 1

After Covid, will digital learning be the new normal?

Nic Fleming, *The New York Times*
21 January 2021

For some, the current global edtech boom is long overdue. Andreas Schleicher, head of education at the Organisation for Economic Co-operation and Development (OECD), has described the pandemic as creating "a great moment" for learning. In May, New York governor Andrew Cuomo publicly questioned why physical classrooms still exist at all, as he announced that former Google CEO Eric Schmidt and Bill Gates would help rethink education in the state.

Sceptics, however, warn that a "digital divide" further widens existing attainment gaps and inequalities faced by disadvantaged children. Others say schools are ill-equipped to protect their pupils' data, and that the growing role of commercial interests both within state education and through a booming direct-to-consumer edtech market amounts to privatisation by stealth.

At the end of March, with such short notice of the shutdown, most UK schools turned to their existing digital tools to help their pupils continue learning. For some this meant simply uploading links to worksheets to school websites, while others gave live lessons via video conferencing. [...]

Critics like the writer Naomi Klein say the tech giants were quick to see Covid-19 as an opportunity to accelerate their ambitions in education. In June, for example, Microsoft published a position paper called Education Reimagined. It starts: "The fallout from Covid-19, continuing advances in digital technology, and intensifying pent-up demand for student-centred learning have combined to present an unprecedented opportunity to transform education across whole systems."

But will schools continue their digitally enhanced approach, post-pandemic? Investors certainly think so. Global investment of venture capital in edtech more than doubled from $7bn in 2019 to a record $16.1bn in 2020, according to market intelligence consultancy HolonIQ.

Others too believe the shift will be permanent. "Covid has given an impetus to schools to adopt, roll out and use more of the functionality of edtech tools," says Hannah Owen, of the Nesta innovation foundation. "It's likely, and optimal, that we'll move to blended models, where remote and digital platforms support in-person classroom teaching, and contribute to minimising teacher workload."

[...Still,] privacy campaigners are concerned that teachers, never mind parents and children, are unable to keep track of what edtech companies are doing with pupil data. When schools

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sign the G Suite for Education Agreement, for example, they agree Google makes "commercially reasonable changes" to their terms "from time to time".

"The terms and conditions for many of these products are pages long, hard to follow, change frequently, and schools don't send them to parents anyway," says Jen Persson, of the campaign group Defend Digital Me. "So it's very hard to understand how Google or anyone else processes a child's data."

In September, the Washington-based International Digital Accountability Council reported that 79 of 123 edtech apps it examined shared user data with third parties. This could include names, email addresses, location data and device IDs. It found, for example, that the popular language learning app Duolingo was sharing user IDs with outside parties including Facebook.

"Once schools become dependent on the tech giants' systems for teaching in class, homework, management and communications, and once a certain threshold is reached in the number of schools they operate in, then the state delivery of education becomes entirely dependent on private companies," says Persson.

Meanwhile, there has been a huge growth in the direct-to-consumer digital education market during the pandemic, highlighted in "Commercialisation and privatisation in/of education in the context of Covid-19", a report co-authored by Williamson and published by the international teaching union umbrella organisation Education International in July.

[...] Those voicing concerns stress they are not against digital tools per se. Rather they question the growing role of those with financial interests in edtech in determining how they are used and in shaping the way schools are run. "Big-tech billionaires have an oversized influence in shaping education policy," says Watters. "Some of these companies pay very, very low taxes, and their responsibilities are to start contributing properly in taxes, not to provide free Chromebooks. We need schools to be more about what the public wants and not what edtech companies want them to look like."

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A. Document 2

How the pandemic is reshaping education

Donna St. George, Valerie Strauss, Laura Meckler, Joe Heim and Hannah Natanson, *The Washington Post*

15 March 2021

The coronavirus pandemic upended almost every aspect of school at once. It was not just the move from classrooms to computer screens. It tested basic ideas about instruction, attendance, testing, funding, the role of technology and the human connections that hold it all together. A year later, a rethinking is underway, with a growing sense that some changes may last. [...]

The pandemic pointed anew to glaring inequities of race, disability and income. Learning loss is getting new attention. Schools with poor ventilation systems are being slotted for upgrades. Teachers who made it through a crash course in teaching virtually are finding lessons that endure. After a year when some systems did nothing but school by computer screen, it has become clear that learning virtually has a place in the nation's schools, if simply as an option.

"It's like a genie that is out of the bottle, and I don't think you can get it back in," said Paul Reville, former Massachusetts secretary of education and founding director of Harvard University's Education Redesign Lab at the Graduate School of Education. "In many respects, this is overdue."

Few suggest that remote learning is for everyone. The pandemic showed, unmistakably, that most students learn best in person — in a three-dimensional world, led by a teacher, surrounded by classmates and activities.

But school systems across the country are looking at remote learning as a way to meet diverse needs — for teenagers who have jobs, children with certain medical conditions, or kids who prefer learning virtually. It has also emerged as a way to expand access to less-common courses. If one high school offers a class in Portuguese, students at another school could join it remotely. [...]

In the Washington region, suburban Montgomery County is exploring the creation of a virtual academy for full-time online instruction. Parents have advocated for a program for some time, said Gboyinde Onijala, a spokeswoman. "The pandemic has helped us see that it is possible and can be done well," she said.

A study by the Rand Corp., a nonprofit research organization, found about 2 in 10 school systems were adopting virtual schools, or planning or considering the idea. It was the

innovative practice that the greatest number of district leaders surveyed said would outlast the pandemic. Not everyone imagines the same path forward.

"Remote learning is a supplement, not a substitute, for in-school instruction," said Randi Weingarten, president of the American Federation of Teachers, emphasizing that classroom learning is best for most students and that remote school can mean intense isolation. "Staring at a screen all day is not optimal," Weingarten said. "Zoom fatigue is real."

The quality of remote learning varied widely among school districts, with parents complaining about the lack of live instruction and individual attention as well as technical difficulties. Even many families who want remote learning to continue want it improved.

Remote learning has also meant a spike in failing grades for the most vulnerable students in some areas, including English language learners. And across the country an unprecedented number of students have gone off the radar even as schools try to track them down.

Kevin Dougherty, a Laytonsville, Md., parent, said that while remote education has worked for some families, most kids have struggled — and the toll on mental health and social well-being is hard to ignore. Any program, he said, should be operated by the state, with a dedicated budget so "the needs of virtual learning don't interfere with in-person learning, and vice versa."

Katie McIntyre, a mother of two in Damascus, Md., said that for her family, virtual classes were "wonderful experiences" — especially for her 10-year-old daughter who has autism and is gifted. Teachers have gone above and beyond. "If I had any opportunity to do this again, I would," she said.

A. Document 3

A better way to make sense of pandemic 'learning loss'

Valerie Strauss, *The Washington Post*

25 March 2021

We have all experienced loss during the pandemic. We have lost loved ones and we have lost many aspects of our lives that we thought we could rely on. As students return to classrooms, it is not surprising to hear policymakers, education leaders and parents raise concerns about "learning loss," of students falling behind because of the disruptions to their schooling caused by the pandemic.

There have certainly been losses of school learning for too many students during the pandemic. However, there have also been tremendous gains that educators may not have expected, learning that may be hard to measure with tests.

Recently, school leaders from across the country have discussed proposals that teachers focus only on the reading and mathematics skills that are central to high stakes standardized testing in the coming year, to the exclusion of the arts, science and social studies. We are concerned about these proposals for several reasons.

We argue that learning loss is a faulty way to diagnose the challenges faced by children and youth as a result of the pandemic. Of course, many students have been disconnected from school learning, particularly those children who have not had consistent access to the Internet and places where they can focus on learning at home. We also know that far too many students have suffered from isolation, making it harder to focus on traditional school tasks.

At the same time, during the pandemic, many children and youths have made sense of these challenges by creating and sharing videos, music and poetry to express themselves and connect across virtual spaces. With their families, acting as scientists, they have investigated the ways covid-19 spreads and how to protect their mental and physical well-being. As historians, they have studied our nation's past and present, organizing responses and protesting racial injustice in the streets. They have creatively used materials to construct new worlds and ideas.

Although this knowledge is not likely to be captured by standardized tests, many young people have not lost learning. Instead, they have been figuring out new ways to investigate and connect with one another and with adults in a time of upheaval and uncertainty. Instead of focusing on loss, what happens if we begin by asking what young people and their teachers have learned in the past year?

Educators might first center their attention on the importance of connections. When school went remote last March, teachers and students struggled to stay connected to each other. Over

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time, as students and teachers learned to navigate the new digital world of schooling, they figured out new ways to connect. Many teachers called students' homes for the first time, and some even delivered materials to children who couldn't download them. Rather than typical phone calls that relay disciplinary news, these have been calls to check in with families out of concern for their well-being and a desire to connect.

Teachers, who may have been worried about talking to parents because of their lack of facility with the parents' home languages, have been surprised by shared experiences and new opportunities to connect with parents.

We suggest that teachers continue to reach out to families and to students by continuing a practice of beginning each class by checking in with each student (and with each other) that many have started with their online classes: How are you? What do you need right now? What is giving you joy? We suggest that district leaders and building principals make decisions that ensure that teachers have the time for this important work.

Next, educators might start with both what and how their students have learned during the pandemic. They might invite students to share what they've experienced during the pandemic and how they have felt through poetry, art, music, dance and theater, rather than focusing on test-taking skills. Educators might help students investigate the social and political systems that have led Black and Brown communities to be impacted more negatively by the pandemic and policing. And they might provide opportunities for them to connect what they've learned about the spread of covid-19 and vaccines to a broader understanding of disease, medicine and public health. [...]

We will need students' initiative, creativity and wisdom in the future, to help us promote racial justice, face the worldwide climate emergency, address the next pandemic or public health emergency more quickly and dream new ways of living in better relation with one another and the planet. As we emerge from the pandemic, let's find ways to support our students and affirm what they have *gained* this year not what was lost.
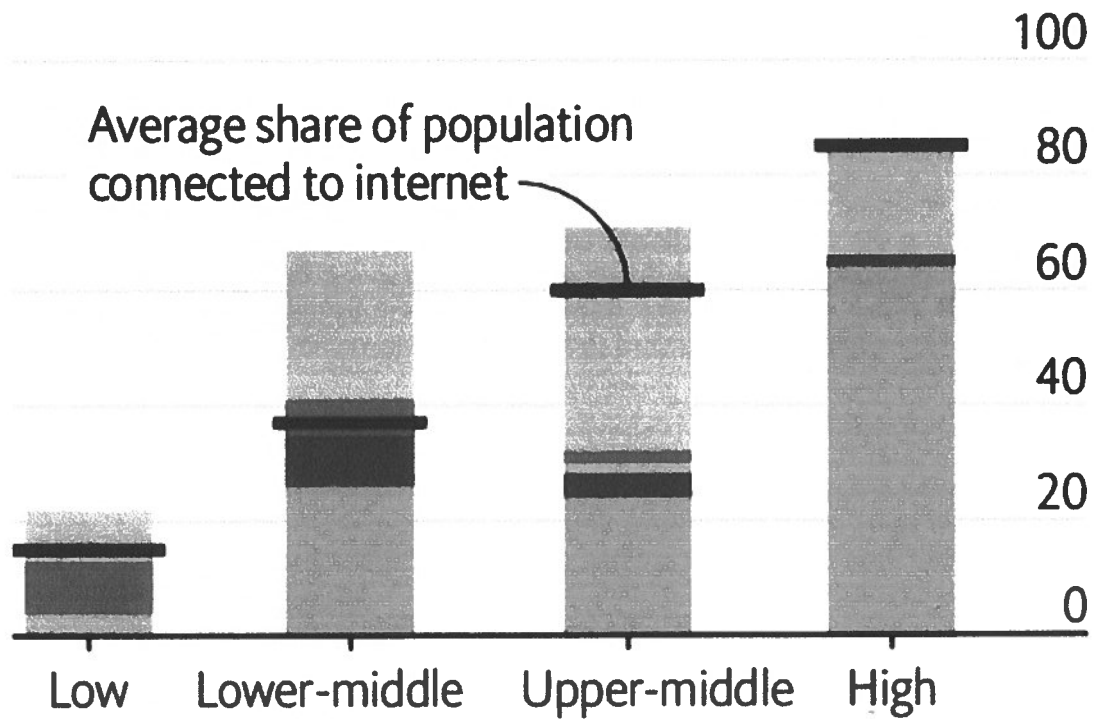
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From a distance
Countries' response to school closures
By remote-learning type and income group, %

■ Online only ■ TV only ■ Radio only ■ TV & radio ■ Online & broadcast*

Average share of population connected to internet

100
80
60
40
20
0

Low   Lower-middle   Upper-middle   High

Sources: Brookings; Centre for
Global Development; World Bank   *TV and/or radio

B. Document 5

How technology can make up for bad, absent teachers in poor-country schools

The Economist
17 November 2018

Like teachers, digital educational technology comes in many forms, from wonderful to appalling. But, used properly, it now deserves more prominence in schools—especially in poor countries where human teachers are often ignorant, absent or both.

The UN's Millennium Development Goals included the ambition that by 2015 all the world's children would complete primary school. This has largely been achieved: nine out of ten children are now enrolled. Alas, the figure is not as impressive as it sounds. Even though most of the world's children go to school, an awful lot of them learn pretty much nothing there. According to a recent World Bank study of seven sub-Saharan African countries, half of nine-year-olds cannot read a simple word and three-quarters cannot read a simple sentence. The reason is terrible teaching.

Paying teachers more, in the hope of recruiting better ones, is not the answer. In poor countries, teachers are well paid by local standards—annual salaries are four times GDP per person in India and five times in Kenya and Nigeria.

As for absenteeism, if expensive teachers do not turn up to class, governments would, surely, sack them? Easier said than done. Poor governments often lack the wherewithal to check on teachers in distant villages. And in many countries, teachers' unions are powerful and governments fear their wrath, so members' jobs are safe.

Several recent studies suggest ed-tech can help. It seems to bring about bigger improvements in poor countries than in rich ones. In a study of a range of interventions in poor countries— including smaller class sizes, nutritional supplements, deworming and incentives for teachers and pupils—tech had the biggest effect.

Some of the scarce resources being spent on teachers could therefore be better spent on ed-tech. That does not mean dumping computers on schools in the hope that children will understand how to use them, a folly on which plenty of money has been wasted. Instead, it means providing schools with software that children can use with minimal help from an adult, that gets things right more often than the teachers do, that adjusts itself to the child's ability, that sends teachers prompts about what they are supposed to be teaching and that allows the authorities to check on whether the teacher is in the classroom.

Sceptics may wonder whether the poorest places have the necessary infrastructure. But Africa is electrifying apace—in Kenya, electricity coverage has gone up from 27% to 55% of

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households in three years. Where the grid is not available, solar chargers can work. Schools do not need internet access. Devices can be taken to where there is a connection to upload or download the necessary information. Cost does not have to be a huge problem either. Tusome ("let's read" in Kiswahili), one of the most successful schemes, costs around $4 per child per year in Kenya, where it is being rolled out across public primary schools. The biggest issue is the government's commitment: where it is enthusiastic, the chances of success are good.

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CONCOURS 2022

ÉPREUVE DE LANGUE VIVANTE

Durée de l'épreuve : 1 heure 30 minutes

**L'emploi de tout document (dictionnaires, imprimés, ...) et de tout appareil
(traductrices, calculatrices électroniques, ...) est interdit dans cette épreuve.**

Cette épreuve est commune aux candidats des filières MP, PC et PSI.

L'épreuve de langue vivante est constituée d'un **exercice d'expression écrite** *qui consiste à répondre à deux questions, et d'un* **thème**.

La première question est notée sur 4.

La deuxième question est notée sur 8.

Le thème est noté sur 8.

La réponse à la première question devra comporter <u>80 mots plus ou moins 10 %</u>.
La réponse à la deuxième question devra comporter <u>180 mots plus ou moins 10 %</u>.
Dans les deux questions de l'exercice d'expression écrite, le candidat indiquera le nombre de mots employés dans sa réponse.
Le non respect des limites indiquées sera sanctionné.

Les candidats sont priés de mentionner en tête de leur copie la langue dans laquelle ils ont composé, qui est obligatoirement celle qu'ils ont indiquée dans leur dossier d'inscription.

Les candidats trouveront l'épreuve d'allemand aux pages 1 et 2, l'épreuve d'anglais aux pages 3 et 4, l'épreuve d'arabe aux pages 5 et 6, l'épreuve d'espagnol aux pages 7 et 8, l'épreuve d'italien aux pages 9 et 10 et l'épreuve de russe aux pages 11 et 12.

Les références et les titres du thème, lorsqu'ils existent, ne sont pas à traduire.

Pour faciliter la correction de l'épreuve, les candidats écriront leur texte toutes les deux lignes.

ANGLAIS

Thème

L'avion à bord duquel Andrew avait pris place se posa en début de soirée à l'aéroport international d'Ezeiza. À sa grande surprise, Marisa était venue le chercher. Il lui avait envoyé plusieurs mails, mais elle ne lui avait donné aucun signe de vie depuis leur dernière conversation téléphonique. Lors de son précédent voyage, ils s'étaient retrouvés à l'hôtel, le lendemain de son arrivée.

Andrew remarqua que plus le temps passait, plus il avait l'impression que les événements s'éloignaient de l'ordre dans lequel ils s'étaient déroulés précédemment.

Il reconnut la vielle Coccinelle* dont les bas de caisses* étaient si corrodés qu'il s'était demandé à chaque soubresaut si son fauteuil ne finirait pas par traverser le plancher.

- J'ai cru que vous étiez partie pour de bon en vacances avec l'argent que je vous ai envoyé, vous m'aviez promis de me donner des nouvelles.
- Les choses ont été plus compliquées que prévu, Antonio est à l'hôpital.

Marc Levy, *Si c'était à refaire*, 2012.

*Aides à la traduction :

Coccinelle = Beetle.
bas de caisses = side skirts.

ANGLAIS

Expression écrite

Starting in January, Amazon for the first time will pay for tuition, fees and books for warehouse, transportation and other hourly employees who want to pursue bachelor's degrees. It will also begin covering high school diploma programs, *GEDs and English as a Second Language certifications for employees.

Amazon employees who have been with the company for at least 90 days are able to use the benefit, and employees must continue working part-time or full-time at Amazon while taking classes. Workers at Whole Foods, which Amazon owns, are not eligible. Its move to add four-year degrees to its package comes as rival employers such as Walmart and Target beef up their college benefit programs for workers.

Walmart said in July that it was dropping a previous $1 a day tuition fee paid by its workers who want to earn a degree at 10 academic partners and also begin covering the costs of their books. Walmart has around 1.5 million workers.

Target in August said it will pay full tuition and books for its more than 340,000 workers at around 40 partner schools. Target also said it will pay up to $10,000 a year for master's programs within its network of partners.

Amazon's move also comes as retailers and warehouses around the country face challenges hiring employees to staff stores and warehouses. In July, there were 879,000 unfilled jobs in the retail industry and 222,000 in the transportation and warehouse industry, according to the latest data from the Bureau of Labor Statistics.

Amazon said in May that it was hiring 75,000 workers across its logistics network and bumping starting pay from its $15 minimum rate to an average of $17 an hour. The company is also offering sign-on bonuses of up to $1,000 to attract workers. "We're spending a lot of money on signing and incentives," said Brian Olsavsky, Amazon's chief financial officer, in July. "It's a very competitive labor market out there. And certainly, the biggest contributor to inflationary pressures that we're seeing in the business."

Amazon also announced Thursday that it plans to retrain 300,000 employees for higher-skilled, fast-growing jobs within the company over the next four years, upping a prior pledge it made in 2019 to train 100,000 workers for new positions. Amazon offers internal retraining programs for roles such as software and IT engineers, data center technicians, and researchers and designers.

*GED = General Educational Development

Adapted from www.cnn.com September 9, 2021.

Questions

1. According to the article, what were the motivations behind Amazon's decisions? **Answer the question in your own words.** (80 words, ± 10 %).

2. In your opinion, to what extent is it the role of private companies to finance higher education? Illustrate your answer with relevant examples. (180 words, ± 10 %).

L'usage de tout système électronique ou informatique est interdit dans cette épreuve.

Rédiger en anglais et en 500 mots une synthèse des documents proposés, qui devra obligatoirement comporter un titre. Indiquer avec précision, à la fin du travail, le nombre de mots utilisés (titre inclus), un écart de 10% en plus ou en moins sera accepté.

Ce sujet propose les 4 documents suivants :

— un dessin de Paresh NATH, paru le 17 juillet 2019 ;

— un article de Jay L. ZAGORSKY, du 18 juin 2019, publié sur le site *The Conversation*[1].

— un éditorial paru dans *The Economist*, le premier août 2019 ;

— un poème de Steve McCARDELL, du 13 août 2017 ;

L'ordre dans lequel se présentent les documents est arbitraire et ne revêt aucune signification particulière.
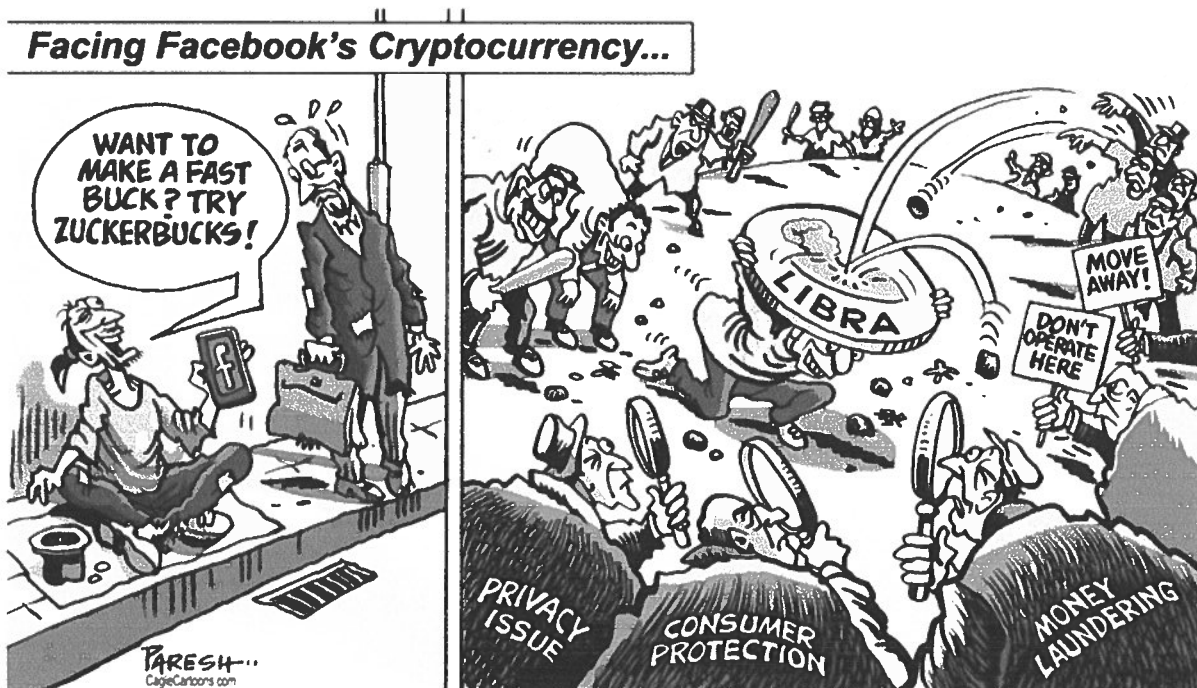
July 17th, 2019

Paresh NATH is the chief cartoonist for India's *National Herald*, and his cartoons are syndicated in the United States by Cagle Cartoons.

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[1] *The Conversation* is an independent source of news and views, sourced from the academic and research community and delivered direct to the public. Its editors work with university and research institute experts. (www.theconversation.com)

THE CONVERSATION

Facebook claims Libra offers economic empowerment to billions – an economist is skeptical

Jay L. Zagorsky, June 18th, 2019

Facebook is joining the cryptocurrency craze. Should we be concerned?

The social network site on June 18 said it's launching a new cryptocurrency called Libra with the help of 27 partners, including MasterCard, Visa, eBay and Uber.

In simple terms, Libra is meant to replace the paper bills in your wallet or purse with a digital equivalent. But unlike other cryptocurrencies like bitcoin, Libra will be directly backed by assets[2].

The white paper describing the vision for this new currency is filled with laudable goals such as creating economic opportunity and advancing financial inclusion. But it will take time to completely understand the ramifications of Libra, which Facebook hopes to launch in 2020.

As a macroeconomist, I believe there are economic benefits to Facebook's cryptocurrency – but also some big potential downsides.

Existing cryptocurrencies are not tied to physical assets. This makes them immune to the whims of national governments but also makes them prone to speculative bubbles and flash crashes.

Libra, on the other hand, is going to be 100% backed by assets. Every unit of Libra currency will be backed by an equivalent basket of bank deposits and short-term government securities in various major currencies.

As a result, Libra will not suffer wild price fluctuations. And since it will be backed by a collection of international currencies and assets, it won't be tied to the fortunes and policies of one country either.

Another effect of being backed by assets is that it may help lower the risk of high inflation in countries across the world. Nobel Prize-winning economist Friedrich Hayek made this very point in his book "The Denationalisation of Money." Hayek believed everyone would be better off if people could pick among different types of private money, like Libra, instead of using government-issued money. Hayek believed issuing private money would banish inflation from the world since people would only use the currency most stable in value.

A second economic benefit of Libra is that it will likely reduce the cost of transferring money around the world because the marginal cost of using it will be so low and Facebook is so prevalent, with about 2.4 billion users. As I have pointed out before, travelers and migrants often pay excessive fees to move money from one country to another.

In a testament to the expected impact of Libra on the average cost of sending money, Facebook's announcement sent the stock of Western Union — a major mover of money internationally — plummeting.

If Libra is a success, it will surely speed up the movement toward more countries becoming cashless societies.

While some, such as Facebook founder Mark Zuckerberg, may favor this outcome, I believe there are two important downsides to going cash-free.

One is that it disenfranchises[3] the poor, elderly and unbanked, who would be pushed further to the margins of society and possibly become unable to take part in modern commerce.

Although the price of an individual virtual currency transaction may be lower, there are still many nontrivial costs necessary to connecting to the digital society. For starters, you will need a smart phone and an internet connection to use Libra, both of which come with regular costs and fees.

Concerns over disenfranchisement have led to places like Philadelphia, San Francisco and the state of New Jersey passing laws to ban cashless stores.

Second, a cashless society makes a country's entire economy more vulnerable to disruptions. That's because a cash-free economy depends on several things always working: a stable supply of electricity, constant communications networks and robust security. If one fails, digital transactions won't work. Two recent news stories impressed on me just how vulnerable the power grid is.

The U.S. government recently acknowledged that it's deploying malware and viruses inside Russia's electrical grid that could cripple it. That's because the U.S. believes the Russians are already inside America's power grid.

Of course, there doesn't need to be nefarious intent to see widespread power outages. Recently the entire power grid collapsed in Argentina, Uruguay and Paraguay. Tens of millions of people were without power for hours, and some had no power for a day. The same thing has happened in parts of the U.S.

Software viruses or accidents that shut down the electrical grid may not be lethal to humans but they can kill a cashless economy.

Will Libra live up to Zuckerberg's lofty economic goals and empower billions of people? Time will tell but meanwhile call me a skeptic. But the consequences of one day relying entirely on ones and zeroes to power our economies is worrisome.

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[2] assets: capital.

[3] disenfranchise: to take power away from.

Rich countries must start planning for a cashless future

Going digital will bring vast rewards but societies are ill-equipped to deal with the side-effects

FOR THE past 3,000 years, when people thought of money they thought of cash. From buying food to settling bar tabs, day-to-day dealings involved creased paper or clinking bits of metal. Over the past decade, however, digital payments have taken off — tapping your plastic on a terminal or swiping a smartphone has become normal. Now this revolution is about to turn cash into an endangered species in some rich economies. That will make the economy more efficient — but it also poses new problems that could hold the transition hostage.

Countries are eliminating cash at varying speeds. But the direction of travel is clear, and in some cases the journey is nearly complete. In Sweden the number of retail cash transactions per person has fallen by 80% in the past ten years. Cash accounts for just 6% of purchases by value in Norway. Britain is probably four or six years behind the Nordic countries. America is perhaps a decade behind. Outside the rich world, cash is still king. But even there its dominance is being eroded. In China digital payments rose from 4% of all payments in 2012 to 34% in 2017.

Cash is dying out because of two forces. One is demand — younger consumers want payment systems that plug seamlessly into their digital lives. But equally important is that suppliers such as banks and tech firms (in developed markets) and telecoms companies (in emerging ones) are developing fast, easy-to-use payment technologies from which they can pull data and pocket fees. There is a high cost to running the infrastructure behind the cash economy — ATMs[4], vans carrying notes, tellers who accept coins. Most financial firms are keen to abandon it, or deter old-fashioned customers with hefty fees.

In the main the prospect of a cashless economy is excellent news. Cash is inefficient. In rich countries, minting, sorting, storing and distributing it is estimated to cost about 0.5% of GDP. But that does not begin to capture the gains. When payments dematerialise, people and shops are less vulnerable to theft. Governments can keep closer tabs on fraud or tax evasion. Digitalisation vastly expands the playground of small businesses and sole traders by enabling them to sell beyond their borders. It also creates a credit history, helping consumers borrow.

Yet set against these benefits are a bundle of worries. Electronic payment systems may be vulnerable to technical failures, power blackouts and cyber-attacks — this week Capital One, an American bank, became the latest firm to be hacked. In a cashless economy the poor, the elderly and country folk may be left behind. And eradicating cash, an anonymous payment method, for a digital system could let governments snoop on people's shopping habits and private titans exploit their personal data.

These problems have three remedies. First, governments need to ensure that central banks' monopoly over coins and notes is not replaced by private monopolies over digital money. Rather than letting a few credit-card firms have a stranglehold on the electronic pipes for digital payments, as America may yet allow, governments must ensure the payments plumbing is open to a range of digital firms which can build services on top of it. They should urge banks to offer cheap, instant, bank-to-bank digital transfers between deposit accounts, as in Sweden and the Netherlands. Competition should keep prices low so that the poor can afford most services, and it should also mean that if one firm stumbles others can step in, making the system resilient.

Second, governments should maintain banks' obligation to keep customer information private, so that the plumbing remains anonymous. Digital firms that use this plumbing to offer services should be free to monetise transaction data, through, for example, advertising, so long as their business model is made explicit to users. Some customers will favour free services that track their purchases; others will want to pay to be left alone.

Last, the phase-out of cash should be gradual. For a period of ten years, banks should be obliged to accept and distribute cash in populated areas. This will buy governments time to help the poor open bank accounts, educate the elderly and beef up internet access in rural areas. The rush towards digital money is the result of spontaneous demand and innovation. To pocket all the rewards, governments need to prepare for the day when crumpled bank notes change hands for the last time.

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[4] ATM: Automated Teller Machine, cash dispenser.

What the Common People Choose
aka The Cryptocurrency Poem

Steve McCARDELL, August 13th, 2017

Once upon a time ago, I had a vivid dream
Where powers in the government had reached to an extreme,
And corporations wielded such sway upon the land
For they had politicians simply eating from their hand.

But then arose a currency that caught them all off guard,
For they did not produce it and controlling it was hard.
They wanted first to stop it, to ban its legal use,
But the people just ignored them and their asinine abuse.

So then the legal powers across the planet Earth
Decided that this currency had a special worth:
The currency was digital, which meant it could be read
And gave the means for tracking as we bought our daily bread.

But only if they owned it, if it were truly theirs.
Then they'd see in detail our most intimate affairs.
They'd know just what we shopped for, and even when and where.
They'd know what we believed in, they'd know for whom we cared.

And even worse, if worse there was, they'd have complete command
O'er who could spend the money that was given by their hand.
Cause a threat to their control, they'd shut off all your cash
And you'd be forced to beg for food or find it in the trash.

Away they did with dollars then, rolled out their plan for all,
And with their legislative weight they made their legal call:
"Join us cashless. Join us now. Trade in your other coin.
We'll care for you and feed the poor. It's time for you to join."

They said it all with such a smile they had most people heed[5],
For after all the government provided for their needs.
But others were unsure then; the coin *they* had was free
From legal interference and the act of bended knee.

The coin held by resisters was apportioned far and wide,
Controlled by no one person; controlled by no one side.
The left, the right, the rich, the poor, each race and gender too,
Could spend as they wished to spend, and do as they wished to do.

The government took action, though, and made it widely known
That only those in terror cells would ever dare to own
A coin not made by government. And so they grew the fear
Among the common people that the enemy was near.

The government began a hunt for all who dared to choose
A coin they did not offer. These terrorists would lose.
But as they started up their hunt, they made a plain mistake:
They chased too many people and shook the rest awake.

And then the population stood all in one big line
With the goal of independence. And a light began to shine.
It shone right down across them all. The government just stared.
It couldn't quite consider that its population dared.

And in this dream I felt a hope I never thought I'd feel,
As if the common people could finally start to heal
From the long abuse of government, and leaders finally could
Support us and protect us, the way that leaders should.

I woke then from this dream of mine and wondered what I'd seen:
Our future, or just wishful thoughts, or something in between.
And as I sit and ponder this, as I sit and muse,
I feel it all comes down to what the common people choose.

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[5] heed: pay attention

L'usage de tout système électronique ou informatique est interdit dans cette épreuve.

Rédiger en anglais et en 400 mots (plus ou moins 10 %) une synthèse des documents proposés, qui devra obligatoirement comporter un titre. Indiquer avec précision, à la fin du travail, le nombre de mots utilisés (titre inclus).

Ce sujet comporte les 4 documents suivants :

— un dessin paru dans *Facebook* de Grizelda Cartoons, le 26 janvier 2019 ;
— un article de Roisin KIBERD publié dans *The Guardian*, le 19 mars 2019 ;
— un article de Perri KLASS publié dans *The New York Times*, le 3 juin 2019 ;
— une lettre ouverte de Clarissa BUSTAMANTE publié sur le site *the Odyssey online*, le 25 avril 2016.

L'ordre dans lequel se présentent les documents est arbitraire et ne revêt aucune signification.
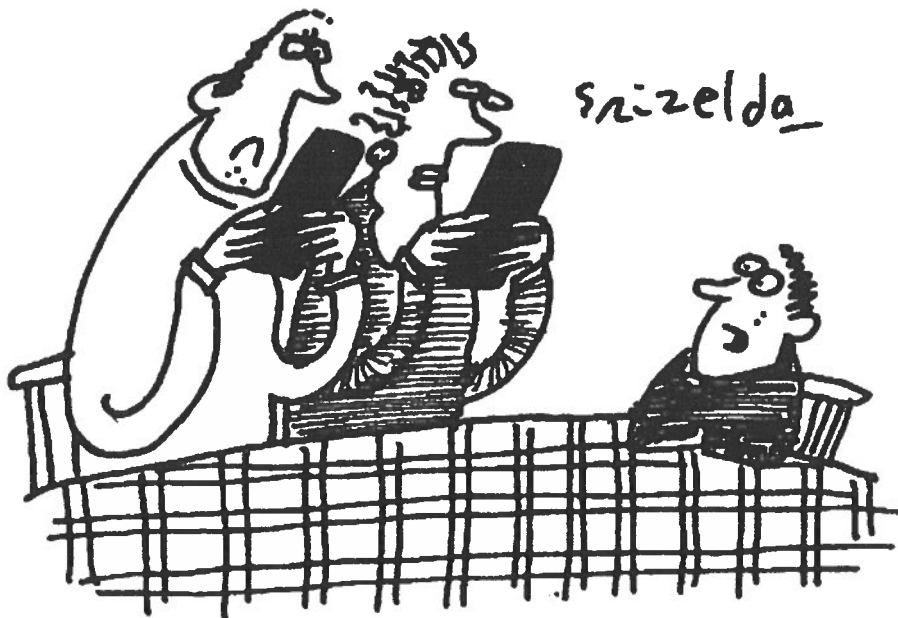
"Mum, Dad...I think I'm addicted to social media."

Source: CARTOON BY GRIZELDA, *Private Eye*, 26th January 2018

Social media addiction is not natural or normal — but is it really a disease?

Roisin KIBERD, 19th March 2019

Is social media addictive? The issue is complex, and probably generational.

It's obvious that what social media does to us, especially those of us who are heavy users, is not natural, or normal. It's not normal to submit opinions for approval every day to an online crowd, nor is it normal to consume the opinions of strangers in bulk. It's not normal to live under the surveillance of software companies, which tailor their advertising with such eerie precision that it seems impossible that they are not listening in on our conversations. It's definitely not normal to wake in the night to use social media, or to spend roughly 24 hours a week on it, returning again and again even though it can make us feel depressed and alone. None of these behaviours were normal a few decades ago, nor are they especially useful to us today, but they're practised by billions of people across the world.

On Monday a report was published by an all-party parliamentary group (APPG), proposing that internet addiction could be classified as a disease, and that research into its impact on mental health could be funded by a taxing social media companies. The paper includes surveys showing that 27% of children who spend three or more hours a day online show symptoms of mental ill health, and called for "robust, longitudinal research" into the possibility of social media addiction.

Addiction is characterised by abnormal behaviour, but what is "normal" any more? Could anyone stand to live without a smartphone, in 2019, and to go without social media? There will be readers who argue it's easy, but for a vast number trying to stay afloat in a precarious, internet-ravaged job market, the answer is no.

The stereotype of the basement-dwelling internet addict is not new – it's more than two decades since Japanese psychologist Tamaki Saito coined the term *hikikomori* to describe a generation of recluses in Japan, who traded their social lives for internet, video-game and media consumption and a state of "adolescence without end". In 1995, The Unabomber manifesto asked that we "never forget that a human being with technology is exactly like an alcoholic with a barrel of wine". Its author, Ted Kaczynski, is, of course, a murderer and a terrorist, and steeped in his own rigidly biased view of civilisation, but the line is prescient: we are the alcoholics, and the barrel is a collection of scrolling feeds we gorge on, drowning before we've had our fill. Add social media, and the result is a toxic brew of solipsism and information overload, the kind that one is either overwhelmed by, or turns one into a monster in order to survive. The UX design employed by these platforms is a maze of dark patterns and cues borrowed from the world of gambling. To use these sites is to become "addicted" – it's in their interest that you never sign out, and keep generating data indefinitely.

Three years ago I was advised by psychiatrists to avoid social media. 2016 was, by anyone's standards, a fairly difficult year to be on the internet, but the experience had left me neurotic and self-loathing, experiencing multiple panic attacks every day. I spent more time online than with other people, and social media had narrowed my view of the world, encouraging me to think in binary terms of good and bad, like and dislike, the kind of black-and-white thinking common to personality disorders and depression.

The link between social media and this narrowing of perspective is well documented: back in 2011, the term "filter bubble" was popularised by Eli Pariser in his book of the same name. It describes the algorithmic hypnosis that companies like Google, Facebook and Twitter perform on their users, learning their habits and reinforcing them with tailored content. Social media, which once promised to act as a window to the world, has slowly but surely become an engine for a kind of global solipsism, a breeding ground for "fake news", bias, compulsion and vanity – which profit the shareholders of these platforms.

One benefit of a disease classification would be that psychiatric professionals might take social media more seriously. On the other hand, it risks shifting focus away from governments, which have failed to regulate platforms, encouraging a culture where vulnerable individuals are at fault. While, in the US, the senator Elizabeth Warren recently proposed to break apart tech multinationals and rework antitrust laws, the MPs' report feels unambitious, and more like a palliative measure.

Any resulting regulation must focus on living with social media, rather than abandoning, restricting or censoring it – even for children and young adults. We're all cyborgs now: we outsource our emotions, our relationships and our working lives to the internet. Could this behaviour be a "disease", when it threatens more than 3 billion users? For better or worse, might it not be an evolution? We should be focusing on living with it, rather than abandoning, restricting or censoring it.

Roisin Kiberd is a writer based in Dublin focusing on technology, culture, and the intersection between the two. She tweets @roisinkiber

The New York Times

When Social Media Is Really Problematic for Adolescents

Perri Klass, M.D., June 3, 2019

There has been a lot of worry about adolescents and social media over the past couple of weeks, with new studies and reports raising questions about mental health and vulnerability, sleep and suicide. I recently wrote about the question of whether the word "addiction" is helpful in understanding our worries about adolescents and their relationships to the devices that connect them to their friends and their world.

In mid-May, a report in JAMA looked at suicide rates among those aged 10 to 19 over the period from 1975 to 2016; boys have traditionally had higher suicide rates, but the gap has narrowed as rates rose among adolescent girls, with the largest percentage increases among girls aged 10 to 14. The study was accompanied by an editorial calling the role of social media use among adolescents "an urgent public health issue that merits further investigation."

Another study, just published in JAMA Psychiatry, showed a suicide bump among 10- to 19-year-olds (both boys and girls, but a larger increase in girls) at the time of the release of the Netflix series "13 Reasons Why"; the study shows association, not causation, but raises the question of "media contagion" — that is, the possibility that the show and the intense discussion of it on social media may have led to some imitative behavior, and cites "the need for safer and more thoughtful portrayal of suicide in the media."

Dr. Michael Rich, an associate professor of pediatrics at Harvard Medical School and the director of the Center on Media and Child Health at Boston Children's Hospital, cautioned against the impulse to look for binary answers to complex problems by drawing too-simple conclusions.

"What we need to do is look at the whole picture around these young people; we need to look at how kids and how we all are using social media," he said.

Children may use interactive media in problematic or dangerous ways because of underlying problems, or they may be particularly vulnerable to what they find on social media. And even while the specific links between social media use and mental health (in both directions) are debated, and researchers try to elucidate the connections and the risks, there is a general acknowledgment that the emotional landscape of the next generation is increasingly tied to those online connections, for better and for worse.

"The technology isn't the problem, we're the problem," Dr. Rich said. "It's the interactivity that draws some kids in." At Boston Children's Hospital's Clinic for Interactive Media and Internet Disorders, he said, they are seeing four manifestations of what they call problematic interactive media use, including gaming (mostly boys), and social media (mostly girls). And then there is pornography, "which is touching kids younger and more profoundly than anyone imagines," he said. And finally there is "information bingeing," with kids "disappearing down a rabbit warren of hot links."

What these different problematic behaviors have in common, Dr. Rich said, is that many of the children involved had underlying issues to start with, such as attention deficit hyperactivity disorder, social anxiety or depression. He and his colleagues are coming to believe, he said, that the problematic use of interactive media "is not a diagnosis at all, but is a syndrome of these other already established psychiatric disorders."

And when kids get treatment for that underlying problem, he said, "We often find these behaviors disappear or get much more manageable."

Dr. Ana Radovic, an assistant professor of pediatrics at UPMC Children's Hospital of Pittsburgh, an adolescent medicine specialist who does research in mental health services, said that only about a third of teenagers with depression get treatment, and it can take a long time.

At a clinic that serves teenagers who are severely depressed or suicidal, she began doing interviews about how they were using social media, and found she was hearing both positive and negative stories. "For example, there was one teen who shared with me that she enjoyed following a band that she liked on Instagram, and it made her feel better," Dr. Radovic said. "And then all of a sudden she saw a picture of the band member self-harming and cutting her arm."

Other adolescents talked about finding help through online groups — perhaps they found support through L.G.B.T.Q. sites which they didn't find at home with their families — or about being talked out of suicidal thoughts on Reddit. "It's a balancing act for some of these teens, finding help and support online but not being able to filter out the negative things," Dr. Radovic said.

And a great deal of that balancing act may have to do with how teenagers are feeling before they go on social media, which then affects what they do on their devices, as well as how they react. Kids who are already feeling depressed have a negative cognitive bias, which affects how they interpret what happens on social media, Dr. Radovic said: "It's a complex relationship, where you start off, what happens to you online, how you interpret what happens to you."

"Teens are really driven by their peers, really rewarded by peer interactions," Dr. Radovic said. "They're exploring their identity, being creative, and sharing things that they've done, but it's difficult for them to filter out the negative," she said, and even more so when they are already vulnerable.

There are changes that tech companies could make in how social media works, Dr. Radovic said, which might reduce some of those negatives and change the online experience. For example, Instagram is looking at doing away with "likes" in a pilot program in Canada, to reduce social pressure and comparisons. There are ways to make things safer, she said, and even helpful; social media could play a part in the "safety plans" that teenagers make to handle suicidal feelings, if they come.

On the other hand, Dr. Radovic said, "there's more and more evidence about sleep and suicidality," with poor sleep a risk factor. And a new report from Common Sense Media emphasizes the ways that mobile devices have invaded our bedrooms, with both teenagers and their parents reporting waking up to check their devices, and using them right before falling asleep — and first thing on waking up.

The ways we use our devices, and the ways our children use their devices reflect who we are and how we're doing, but they also reflect the power of the technology. Dr. Radovic asked, "Can we change how people are using their social media so they're not multitasking constantly, not having it keep them up?" Can we help teenagers filter their online experience to stay away from negative exposure? Or even help them figure out how to use social media to get help when they need it?

"We have sort of checked out of parenting in the digital domain and had them do their own thing both because we felt completely inept next to them, but also because they said, 'this is my space, not yours,'" Dr. Rich said.

"They need us in that space — we draw an artificial distinction between online and offline, real world and virtual world," while for them it is a seamless reality, he said. "We need to parent them in that space."

ODYSSEY   An Open Letter To Social Media

Clarissa BUSTAMANTE, April 25, 2016

Dear Social Media,

I love to hate you and hate to love you. I love your constant stream of adorable puppies, heartwarming videos, and posts from my friends. I love how you're there anytime I need you, and I can access you from multiple devices. I love the fact that every time I look at you I see something new. I also love how you connect me to people and how you give me inspiration every day. I love all of your many facets, and how they all have a different purpose. Facebook is great for keeping in touch with people who are far away, Instagram is great for freezing moments in life and sharing them, Twitter is great for sharing quick, random thoughts, and Tumblr is great for expressing oneself and thinking deeply.

I love how I can bounce from app to app and always be entertained. But on the other hand, I hate you. I hate your constant stream of things that don't matter, articles that are not true and posts from people who rant about things they don't understand. I hate how you're there anytime I need you, and I can access you from multiple devices. I hate the fact that every time I look at you, there is something new that I soak in as truth. I hate how you constantly overwhelm me by connecting me with people from all over the world and I hate how you inspire me to be like them. I hate you for inspiring me to look at these people and making me question myself. Making me wonder; Why am I not more attractive? Why do I not have more money? Why can't I live a life like them?

I hate all of your many facets, giving me endless reasons to stay on my phone and ignore the outside world. Making me wonder; What's out in the world that's not already in my phone? Why travel when I can follow an Instagram account that will show me the same thing? I hate you for limiting my creativity and forcing me to limit my ideas to 140 characters for instant gratification. I hate how much I care about likes and "retweets." I hate my attachment to you and the feeling of separation anxiety when I'm not with you. I love to hate you and hate to love you.

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L'usage d'un dictionnaire et de machines (traductrice, calculatrice, etc.) est strictement interdit.

Rédiger en anglais et en 400 mots une synthèse des documents proposés, qui devra obligatoirement comporter un titre.
Vous indiquerez impérativement le nombre total de mots utilisés (titre inclus) et vous aurez soin d'en faciliter la vérification en mettant un trait vertical tous les vingt mots.
Des points de pénalité seront soustraits en cas de non-respect du nombre total de mots utilisés avec une tolérance de ± 10 %.
Concernant la présentation du corpus dans l'introduction, vous n'indiquerez **que la source et la date de chaque document**. Vous pourrez ensuite, dans le corps de la synthèse, faire référence à ces documents par « doc.1 », « doc. 2 », etc.

Ce sujet comporte les 4 documents suivants qui sont d'égale importance :

- **Document 1 -** Individually Tailored Streaming Means We Are Now All Living in Our Own Bubble of Sound, Hugh Linehan (extrait et adapté de *Irish Times*, 26 October 2019).

- **Document 2 -** How Spotify Has Changed the Way We Listen to Music, Yuna Yonak (extrait et adapté de *www.audioxide.com*, 11 February 2019).

- **Document 3 -** Why Streaming Is a Good Thing for the Music Industry, Ailey Butler (extrait et adapté de *Backstage Pass, University of the Pacific*, 2019).

- **Document 4 -** Music Industry: A Closer Look into Streaming Services (*Infographic.ly*, https://telegraph.co.uk, March 2016).

Document 1 - Individually Tailored Streaming Means We Are Now All Living in Our Own Bubble of Sound

You may not be interested in audio streaming, but audio streaming is interested in you. Right now we are in the middle of a radical reordering of how we listen to music and to words. So, even if you still rely on tottering stacks of CDs for your musical fix, and you haven't figured out where the podcasts live on your phone, music and podcast apps are inexorably eating into the services you grew up with and will ultimately replace all but a tiny remnant of them. Record companies and radio stations are to the mid-21st century as blacksmiths and lamplighters were to the early 20th.

This transformation is usually seen through the lens of business or technology coverage, or from the perspective of those who are losing out, most notably the musicians who find the publishing and performance royalties which previously sustained them have eroded away to almost nothing. Such developments are very significant, of course, but there's been less attention paid to how actual listening, whether as an individual and or as a collective experience, is also changing. One immediately observable effect is atomisation, with listeners gravitating towards the niche and away from the mainstream. After all, why endure an hour of radio programming when you don't care about half the stuff they're covering? In disruptive technology jargon, the process is known as "unbundling"; listeners no longer have to play by the old rules, where they had to buy into a whole package to get the bits they actually wanted. Broadcasters, newspapers and other legacy providers bemoan the loss of good fortune that comes along with this. You will never hear that song the DJ is playing, because it doesn't fit with your user profile.

Perhaps so, the old bundles are dying. But what's replacing them, and how is it changing our behaviour? All around us, traditional media are being replaced by individually tailored niches. It's surely no coincidence that, in audio, this atomisation is accompanied by a surge in the popularity of headphones. The individual listening experience becomes more personal and intimate. At the moment, at least, people seem to prefer podcasts and music that make them feel as if they're alone in the room with the performers. Where atomisation becomes most apparent is when you see attempts to push back against it. Irish Spotify users with family accounts may have come across the Family Mix which looks at the listening habits of you and your nearest and dearest to come up with a playlist which supposedly reflects those habits. The result is distressing. Spotify claims the mix is "filled with music the whole family can enjoy together". This is not true. It's actually filled with music some members of the family can shout "what the hell is that horrible noise and whose fault is it?" at other members of the family. But as we all turn back with relief to our individual listening devices, is it worth considering whether it's really such a good idea in our day-to-day lives to be so inwardly focused, so cut off from others and the world at large?

Hugh Linehan, *Irish Times*, 26 October 2019

Document 2 - How Spotify Has Changed the Way We Listen to Music

From vinyls to cassettes to mp3 players, the way we access music is constantly changing. Today, instant music streaming services like Spotify now dominate how we discover new music. So how has Spotify changed our listening habits? How did it become such a powerful tastemaker? Thanks to the machine learning technology behind it, Spotify is able to analyse user data, including listening behaviours that may change during different times of the day. This then feeds into creating new Spotify playlist ideas for specific times where users can discover more music. Like an 'Acoustic Calm' or 'Nature Sounds' playlist for before you go to bed. By analysing a song's loudness, tempo, and duration, amongst other things, Spotify can understand complex features users like, and improve its recommendations.

As non-mainstream music becomes more widely available on Spotify, and the number of playlists dedicated to independent artists increase, listeners are becoming more flexible with their listening habits. Eventually this curiosity for new music presents live performance opportunities to artists and we see independent artists going on world tours or festivals, reuniting with fans from around the world. For example Oxford four-piece Glass Animals said that they owed their success to streaming. The band went on tour for two and a half years after they released their debut album. And they're not a one-off. Spotify alone generated $40m+ in ticket sales in 2017 and it also acts as

a platform for artists to promote their merchandise on the 'Merch Bar' and lets fans know if they have a concert in their city.

With the rise of digital streaming services, the music market has once again gained a foothold after years of financial instability due to piracy, but it still has a long way to go to catch up with the physical music era. With Spotify, for only £9.99, you get access to ad-free listening of millions of songs. Meanwhile Spotify pays artists $0.00038 per play. So as a band you'd be making decent enough money if you managed to get around a billion plays in total in a year. Such an unbalanced royalties system is often why Spotify is criticised.

Although music streaming services allow artists to stay more independent, they have a lot more competition and pressure to stay trendy, and on top of their game. They also aren't regarded as profitable as the big names in the industry, which ends up with them getting paid less for their often bigger efforts. However, while some more successful artists argue that Spotify is ruining the music industry by undervaluing creators, independent artists often speak of it as a game-changer that has allowed them to reach an audience. As Brooklyn-based, singer-songwriter Vérité says, 'Spotify won't build your career, nor is that its responsibility. It provides a platform for discovery. It will link your listeners to your merchandise and concerts'. But the majority of the listeners choose to listen to mainstream music instead of buying records. This cycle forces the artist to tour for longer and release EP after EP. The pressure to be discovered on Spotify playlists is also changing the way artists write music. *The Guardian*'s Sam Wolfson argues, 'There are lots of small ways Spotify has changed the way music is made. The intros of songs have become shorter to stop listeners skipping a track with a slow buildup. Albums have got longer simply because listening to a 20-track album generates twice as much revenue as listening to a 10-track one.' Artists have also found it lucrative to adapt their songs to different playlists to get more streams.

Although there is hope that Spotify will continue to encourage diverse music listening habits and allow musicians to find new fans, the platform should be open to more discussion with musicians on how it can empower them and their creativity. Spotify has changed listening habits forever. There has to be a way for that to benefit both fans and artists. For all its technical achievements, Spotify needs guidance and support in making its revolution work to everyone's benefit.

Yuna Yonak, *www.audioxide.com*, 11 February 2019

Document 3 - Why Streaming Is a Good Thing for the Music Industry

Streaming is how most of us get our music now. Three-quarters of the recorded music industry's revenue in 2018 came from music streaming. Although there continues to be a lot of talk about it killing the music industry and the measly royalties artists get paid from it, industry professionals should give streaming services more credit. Streaming has helped people listen to more music than ever before, it is now easier for smaller and independent artists to get their music heard, and it has largely eliminated music piracy. All of these reasons point to why streaming is beneficial for the music industry, even if it has not been able to bring us back to the music industry's heyday of the late 1990s yet, with respect to revenue.

People are listening to more artists than ever before because of streaming services and their prevalence. There are over 30,000,000 songs ready to play on Spotify alone. In the same vein, music streaming also makes it easier for us to discover lesser known artists because anyone can put music onto streaming platforms. Distributing music online is much less complicated and requires fewer resources than distributing physical products. This means that independent artists are able to get their music on a platform and start racking up streams, even without a label. This helps to level the playing field of the music industry since it takes power away from the major labels. Artists used to need labels because labels could distribute huge quantities of physical products, but in the age of the Internet, this is changing. It is as easy as a four-step process to put an artist's music out on Spotify, meaning that smaller creators and independent artists are able to get their music on there easily.

Possibly the most interesting thing about streaming is how it has largely eliminated music piracy which ran rampant in the early 2000s and cost the industry so much money since people began refusing to buy records. Fortunately, streaming has helped build the industry back up again, and
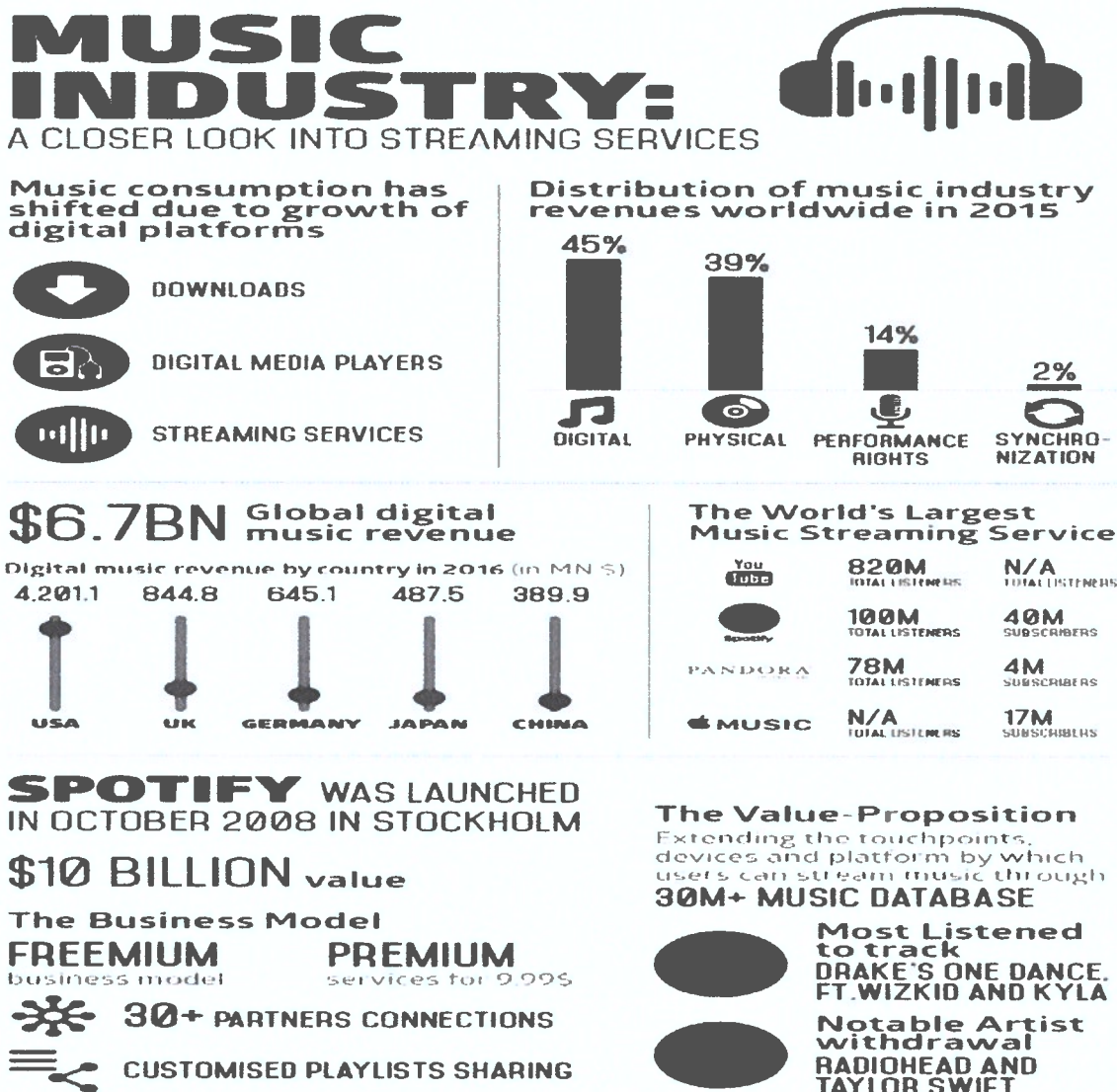
eliminates the need for people to pirate music which undoubtedly benefits the music industry as a whole.

Of course, as with any new technology, there are downsides. Streaming may make a lot of revenue for the industry, but only a small fraction of that money actually gets to the artist. Streaming royalties are low for artists compared to what they used to be, and that is why legacy artists and superstars speak out about it, believing that streaming and the small royalties are not fair to artists. These artists may have a point. With the current way that the revenue is split, the royalty checks of the artists do not look like what they did in the 1990s. There is also the issue that streaming cannot support as robust a recording industry as back in the heyday, because people are simply not going to spend as much on music as they used to in the 1990s, especially not now that you can get a per-month subscription to all the music in the world for only $10 a month.

All in all, with all the bad press about streaming, it is important to remember that the music industry and its players should give streaming more credit than it gets for the benefits it brings to them.

Ailey Butler, *Backstage Pass, University of the Pacific*, 2019

Document 4 - Music Industry: A Closer Look into Streaming Services

MUSIC INDUSTRY:
A CLOSER LOOK INTO STREAMING SERVICES

Music consumption has shifted due to growth of digital platforms

- DOWNLOADS
- DIGITAL MEDIA PLAYERS
- STREAMING SERVICES

Distribution of music industry revenues worldwide in 2015

- 45% DIGITAL
- 39% PHYSICAL
- 14% PERFORMANCE RIGHTS
- 2% SYNCHRO-NIZATION

$6.7BN Global digital music revenue

Digital music revenue by country in 2016 (in MN $)

USA	UK	GERMANY	JAPAN	CHINA
4.201.1	844.8	645.1	487.5	389.9

The World's Largest Music Streaming Service

	Total listeners	
YouTube	820M TOTAL LISTENERS	N/A TOTAL LISTENERS
Spotify	100M TOTAL LISTENERS	40M SUBSCRIBERS
PANDORA	78M TOTAL LISTENERS	4M SUBSCRIBERS
MUSIC	N/A TOTAL LISTENERS	17M SUBSCRIBERS

SPOTIFY WAS LAUNCHED IN OCTOBER 2008 IN STOCKHOLM

$10 BILLION value

The Business Model

FREEMIUM business model

PREMIUM services for 9.99$

- **30+** PARTNERS CONNECTIONS
- CUSTOMISED PLAYLISTS SHARING

The Value-Proposition
Extending the touchpoints, devices and platform by which users can stream music through
30M+ MUSIC DATABASE

Most Listened to track
DRAKE'S ONE DANCE. FT.WIZKID AND KYLA

Notable Artist withdrawal
RADIOHEAD AND TAYLOR SWIFT

Infographic.ly, https://telegraph.co.uk, March 2016

FIN

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CONCOURS
COMMUN
INP

ÉPREUVE MUTUALISÉE AVEC E3A-POLYTECH

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- en cochant la case 40 A (1ʳᵉ ligne) ;
- en expliquant au verso de la grille réponse les raisons des initiatives qu'il a été amené à prendre et poursuivra normalement son épreuve.

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I.	Compréhension :	12 items (10 points sur 20)
II.	Lexique :	12 items (5 points sur 20)
III.	Compétence grammaticale :	15 items (5 points sur 20)

Réponse juste : + 3
Pas de réponse : 0
Réponse fausse ou réponses multiples : – 1

Instructions
Lisez le texte et répondez ensuite aux questions.
Choisissez parmi les quatre propositions de réponse (A, B, C ou D) celle qui vous paraît la mieux adaptée. Il n'y a qu'une seule réponse possible pour chaque item.
Reportez votre choix sur la feuille de réponse.

Index " alphabétique "

ANGLAIS

Cambridge is right to join the flight from fossil fuels. But divestment is just a start.

It's been a year of considerable blows to the fossil fuel industry. Thursday's announcement that the University of Cambridge will <u>divest</u> its <u>endowment</u> from fossil fuel corporations is another considerable win for campaigners, who have spent many years <u>doggedly</u> demanding change from an institution that – despite being a global leader in scientific research and education – has
5 been obstinate about severing its many ties to the fossil fuel industry, including significant research funding from Shell and BP.

Of course, serious questions will doubtless be raised about why a full decade is needed to shift money out of direct fossil fuel investments, and until 2038 to arrive at a "net-zero portfolio". And the absence of a commitment on cutting the university's close research ties with fossil fuel
10 companies is also sure to draw some ire. Ultimately, however, the announcement is significant for the message it sends about the future of the fossil fuel industry. It joins a <u>swelling</u> chorus of voices <u>spanning</u> cities from Oslo to LA, more than half of the UK universities, the Republic of Ireland, Norway's $1tn sovereign wealth fund, and even – in a very limited way – BlackRock, the world's largest asset manager. Divestment <u>pledges</u> worldwide now total $11tn worth of fossil fuel
15 assets.

But as encouraging as this <u>snowballing</u> divestment has been to watch, the fact that even companies such as BlackRock – with its notoriously poor record on climate – are slowly coming onboard should prompt some reflection on the stage the divestment movement has reached, and whether it needs to evolve if it's to continue pushing for the radicalism we need. We appear
20 to have firmly entered the era that divestment campaigners have long foreseen: fossil fuels are simply no longer good investments.

This year, oil companies have written down billions in assets, and waves of bankruptcies have swept US shale gas while the North Sea oil and gas industry has <u>shed</u> jobs. ExxonMobil was removed from the Dow Jones industrial average after nearly a century, and five tech companies
25 now dominate the S&P500, occupying an astonishing 20% of the index's value compared with the <u>measly</u> 2.3% claimed by the entire energy sector.

Prudent financial institutions are responding by shifting investments to industries where returns are both greater and more secure in the long term. Sometimes this includes green energy, but often it simply means following the market, with freed-up cash shifting to tech and other financial
30 companies. Even "ethical" investment strategies, so-called "ESG (environmental, social, governance)" funds, have come under fire for poor quality control, inconsistent or dubious ratings, and questionable impacts.

Divestment has played a significant part in advancing the timeline for fossil fuels' demise. Although questions have been raised about the immediate impact of divestment on share prices,
35 the movement has undoubtedly stigmatised investments in the fossil fuel industry. Last year, Shell admitted the divestment movement posed a "material risk" to its business model. But there is a limit to the number of endowments and funds that represent beneficiaries who can be readily organised and are willing to submit to these demands, such as student bodies, religious communities and the constituents of progressive councils and cities. A vast amount of the
40 financial system is deeply undemocratic, and – despite the industry's <u>gloomy</u> outlook – demonstrably unresponsive to demands for an end to fossil fuel finance. Just five North American banks, for instance, have financed nearly $1tn in fossil fuels since 2016, with little sign of slowing. The question, then, is what comes next?

Divestment is a means of addressing an urgent, immediate problem: the financing of fossil fuels.
45 But the divestment movement is fighting a war of attrition, in which its opponents – at least within

the economic and political systems built by and for them – are considerably better resourced. The climate crisis is a product of those same systems, and it demands that we fight against them.

Climate and environmental breakdown are a crisis of inequality, rooted in profound imbalances
50 in wealth and power both within and between countries. A spate of reports and letters from leading scientists have sounded the alarm on this sober reality, and warned that we will likely fail in combating the climate crisis unless we radically reduce inequality and redistribute consumption and resource use. [...] But to challenge the status quo driving this crisis in the first place, the movement must challenge the immense and undemocratic structural power of the
55 financial system, and the explosion of inequality it has supported, and not settle for greener portfolios.

Adapted from *The Guardian*, 4 October 2020

I. COMPRÉHENSION
Choisissez la réponse qui vous paraît la plus adéquate en fonction du sens du texte.

1. From line 1 to line 6, it should be understood that the University of Cambridge:
(A) will give money to fossil fuel companies.
(B) will accept fewer funds from fossil fuel firms.
(C) has renewed its contract with fossil fuel firms.
(D) defends fossil fuel companies.

2. From line 1 to line 6, it should be understood that activists:
(A) used to criticize the University of Cambridge.
(B) approved of Cambridge's former attitude.
(C) have asked Cambridge to accept BP's funds.
(D) have received money from Shell and BP.

3. From line 7 to line 15, it should be understood that Cambridge:
(A) intends to increase its carbon emissions in 2038.
(B) will ask for more funds from fossil fuel industry in 2038.
(C) will increase its investments in fossil fuel industries starting from 2038.
(D) will have stopped investing money in fossil fuels in 2038.

4. From line 7 to line 15, it should be understood that $11tn is the amount of money:
(A) Cambridge will soon receive.
(B) that will not be invested in fossil fuels worldwide.
(C) the university's research costs.
(D) fossil fuel industry saves every year.

5. From line 16 to line 21, it should be understood that BlackRock:
(A) is an ecological firm.
(B) refuses to go green.
(C) intends to reduce its investments in fossil fuel industry.
(D) is in total contradiction with Cambridge's position.

6. From line 22 to line 26, it should be understood that most fossil fuel industries:
(A) have increased their revenues.
(B) have agreed on producing less.
(C) have reduced their staff.
(D) have seen their turnover go down.

7. From line 27 to line 32, it should be understood that:
(A) Tech and financial firms are losing ground.
(B) Many financial institutions have invested in green energy.
(C) Financial companies tend to show less interest in fossil fuel industry.
(D) ESG controls are reliable.

8. From line 33 to line 43, it should be understood that fossil fuel companies:
(A) are approved of by student associations.
(B) are criticized by the whole financial system.
(C) can still rely on funds from financial firms.
(D) try to attract religious communities.

9. From line 33 to line 43, it should be understood that:
(A) The amount of money invested by North American banks is insignificant.
(B) Fossil fuel energy still attracts many banks.
(C) Just 5 American banks invest in fossil fuel energy.
(D) In 2016, fossil fuel firms' revenue reached $1tn.

10. From line 44 to line 48, it should be understood that fossil fuel firms:
(A) are easy to fight.
(B) have tight links with governments.
(C) don't need the economic system's support.
(D) are weaker than their opponents.

11. From line 49 to line 56, it should be understood that according to scientists:
(A) global warming and social inequality are not linked.
(B) over-consumption touches all countries.
(C) climate change is linked to inequality.
(D) combating climate change means reducing the people's resources.

12. From line 49 to line 56, it should be understood that the climate crisis can be solved only:
(A) by the financial system.
(B) thanks to investments in green energies.
(C) if fairer political and financial systems are set in place.
(D) if consumption increases.

II. LEXIQUE
Choisissez la réponse qui vous paraît la plus appropriée en fonction du contexte.

13. divest (line 2) means:
(A) receive
(B) send
(C) remove
(D) refuse

14. endowment (line 2) means:
(A) obligations
(B) rules
(C) applications
(D) fundings

15. doggedly (line 3) means:
(A) unsuccessfully
(B) slowly
(C) continuously
(D) smartly

16. swelling (line 11) means:
(A) increasing
(B) competent
(C) loud
(D) interesting

17. spanning (line 12) means:
(A) covering
(B) asking
(C) running
(D) collecting

18. pledges (line 14) means:
(A) debts
(B) promises
(C) arrangements
(D) contracts

19. snowballing (line 16) means:
(A) freezing
(B) whitening
(C) accumulating
(D) jumping

20. shed (line 23) means:
(A) offered
(B) promoted
(C) cut
(D) changed

21. measly (line 26) means:
(A) minimum
(B) average
(C) equal
(D) meager

22. gloomy (line 40) means:
(A) dark
(B) brilliant
(C) shining
(D) short

23. spate (line 50) means:
(A) extract
(B) flood
(C) meeting
(D) addition

24. sober (line 51) means:
(A) humble
(B) unique
(C) hard
(D) obvious

III. COMPÉTENCE GRAMMATICALE

Choisissez la réponse adéquate.

25. Climate change .... a burning issue .... decades.
(A) is / since
(B) has been / since
(C) is / for
(D) has been / for

26. Fossil fuel corporations are .... criticized.
(A) the more and the more
(B) most and most
(C) more and more
(D) the more and the most

27. They got .... funds last year.
(A) fewer
(B) less
(C) a little
(D) little

28. They need .... before investing.
(A) a lot advice
(B) a lot of advices
(C) a lot of advice
(D) lots of advices

29. I can't stand .... such a company.
(A) you supporting
(B) your supporting
(C) you support
(D) you to support

30. However ...., we shall succeed.
(A) it may be long
(B) it maybe is long
(C) long is it
(D) long it may take

31. Their project is supposed .... trillions of dollars.
(A) to cost
(B) costing
(C) cost
(D) costs

32. This is .... thing I have ever heard.
(A) the sillier
(B) the silliest
(C) they more silly
(D) most silly

33. They .... relying on them.
(A) had better to stop
(B) had better stop
(C) had to better stop
(D) had better stopping

34. It goes without .... that they can't exploit their workers.
(A) say
(B) to say
(C) saying
(D) to saying

35. We were told .... earlier.
(A) coming
(B) come
(C) to coming
(D) to come

36. .... you go, ... it is for the planet.
(A) The greener / the best
(B) The greenest / the better
(C) The greener / the better
(D) The greenest / the best

37. They couldn't believe them .... they knew they were liars.
(A) all the more as
(B) all the more than
(C) all the most since
(D) all the most as

38. Green energy .... during the past meeting.
(A) has been debated
(B) will be debated
(C) debated
(D) was debated

39. If you .... more careful, you .... so much money.
(A) were / wouldn't have lose
(B) were / will not lose
(C) had been / wouldn't have lost
(D) have been / wouldn't lose

FIN

30

ÉCOLES NORMALES SUPÉRIEURES

ÉCOLE NATIONALE DES PONTS ET CHAUSSÉES

CONCOURS D'ADMISSION SESSION 2022

FILIÈRE BCPST

COMPOSITION DE LANGUE VIVANTE ÉTRANGÈRE

Épreuve commune aux ENS de Lyon, Paris, Paris-Saclay et à l'ENPC

Durée : 2 heures

L'utilisation des calculatrices n'est pas autorisée pour cette épreuve.

L'usage de dictionnaire est interdit.

***

Parmi les sujets proposés, le candidat doit traiter celui correspondant à la langue vivante étrangère qu'il a choisie lors de son inscription.

Toute copie rédigée dans une langue qui ne correspondrait pas au choix apparaissant dans le dossier d'inscription définitif du candidat sera considérée comme nulle.

Sujets proposés :

- Allemand

- Anglais

- Espagnol

ANGLAIS

I. VERSION (12 points)

Elizabeth Holmes, the founder of the failed blood testing start-up Theranos, was found guilty of four of eleven charges of fraud on Monday, in a case that came to symbolize the pitfalls of Silicon Valley's culture of hustle, hype and greed.

Ms. Holmes, who had once promised to revolutionize health care, was the most prominent executive to field fraud accusations in a generation of high-flying, money-losing start-ups. A jury of eight men and four women took fifty hours over seven days of deliberations to reach a verdict, convicting her of three counts of wire fraud by lying to investors to raise money for her company.

Stephanie Hinds, a U.S. attorney, said in a statement that the guilty verdicts reflected Ms. Holmes's "culpability" in this large-scale investor fraud." The verdict stands out for its rarity. Few technology executives are charged with fraud and even fewer are convicted. While the verdict was read, Ms. Holmes — who had falsely claimed that Theranos's blood tests could detect a variety of ailments with just a few drops of blood — sat motionless.

"Ms. Holmes's conviction sends a message to other executives to be careful about their statements to investors and the public", said Jessica Roth, a law professor at Cardozo School of Law. It "shines a light on the importance of drawing a distinction between truth and optimistic projections — and keeping that clear in one's mind," she said.

Holmes said she believed that Theranos's tests worked and had relied on the expertise of more qualified people running the company's lab. And she used her charisma to sell jurors on the same vision of the future that, years earlier, had helped her win over investors, world leaders and the press. "I wanted to talk about what this company could do a year from now, five years from now, ten years from now," Ms. Holmes said. "I wanted to talk about what was possible."

Ms. Holmes left the courthouse after dark on Monday, holding hands with her mother and partner. As reporters shouted questions, Ms. Holmes avoided eye contact and stared straight ahead.

Adapted from *Elizabeth Holmes is found guilty of four counts of fraud*, by Erin Griffin and Erin Woo, in the *New York Times*, Jan. 4, 2022, Section A, Page 1.

II. QUESTIONS (8 points, minimum de 100 mots par question)

1. What does Jessica Roth mean when she argues that it is important to draw "a distinction between truth and optimistic projections"?

2. Are you confident that biotechnological companies can compete in the modern-day marketplace without exaggerating their achievements?

LANGUE VIVANTE OBLIGATOIRE : ANGLAIS
Durée : 2 heures

L'usage d'abaques, de tables, de calculatrice et de tout instrument électronique susceptible de permettre au candidat d'accéder à des données et de les traiter par les moyens autres que ceux fournis dans le sujet est interdit.

Chaque candidat est responsable de la vérification de son sujet d'épreuve : pagination et impression de chaque page. Ce contrôle doit être fait en début d'épreuve. En cas de doute, le candidat doit alerter au plus tôt le surveillant qui vérifiera et, éventuellement, remplacera le sujet.

Ce sujet comporte 3 pages numérotées de 1 à 3.

Si, au cours de l'épreuve, un candidat repère ce qui lui semble être une erreur d'énoncé, il le signale sur sa copie et poursuit sa composition en expliquant les raisons des initiatives qu'il a été amené à prendre.

L'épreuve comporte trois parties :

I – Thème : 6 points sur 20

II – Compréhension de l'écrit : 6 points sur 20

III – Expression écrite : 8 points sur 20

Vous indiquerez avec précision à la fin de la question de compréhension et de l'essai le nombre de mots qu'ils comportent. Un écart de 10 % en plus ou en moins sera accepté. Des points de pénalité seront soustraits en cas de non-respect de ces consignes

1

I – Thème

Traduisez le texte ci-dessous en anglais :

      Dans la famille Madrigal, tout le monde a un pouvoir. Enfin presque. Mirabel, l'héroïne du nouveau Disney, *Encanto*, disponible ce vendredi 24 décembre sur la plateforme *Disney+*, est la seule à n'avoir reçu aucun don. Mais si la nouvelle princesse Disney n'a pas de pouvoir, un élément loin d'être anodin lui a tout de même été attribué: elle porte des lunettes.

      Des lunettes rondes et vertes qui font ressortir ses yeux couleur noisette, et qui sont aussi une première pour une princesse Disney. Avant Mirabel, aucune n'en avait porté.

      Ce n'est pas un détail: avec ses cheveux bouclés et ses lunettes sur le nez, Mirabel est une princesse à laquelle les petites filles pourront s'identifier. "On est beaucoup moins dans les stéréotypes de Disney, Mirabel semble être une petite fille tout à fait ordinaire avec un physique ordinaire, et même un problème aux yeux, ce qui est aussi tout à fait ordinaire!", note pour *Le HuffPost* la psychologue Catherine Verdier.

<div align="right">Huffington Post, 24/12/21</div>

II - Compréhension de l'écrit

Lisez le texte ci-dessous et répondez en anglais et en 100 mots (±10 %) à la question qui le suit (en caractères gras).

<div align="center">

The Beano's renaming of Spotty as Scotty isn't 'woke' tokenism – it can help
teen self-esteem about acne
Dr Tess McPherson, www.inews.co.uk, December 23rd, 2021 (abridged)

</div>

"Woke" is a word that gets thrown around so liberally, often critically, that it has become almost devoid of meaning. So it isn't a surprise that the children's comic The Beano has been on the receiving end of accusations after trying to be more sensitive to modern readers.
The comic's character Fatty was renamed Freddy in May – and this week it was announced that Spotty, another of the mischievous Bash Street Kids, will now be known as Scotty rather than the nickname inspired by his acne.
One tabloid mocked Scotty's change with the headline "Woke Street Kids", after Freddy's renaming was dismissed as "comically woke" by the Conservative MP Jacob Rees Mogg.
What matters most in this discussion is doing the right thing by the children across the country who read The Beano.
Few experiences growing up are as universal as acne, affecting between 80 and 95 per cent of adolescents in the UK. How it is represented in media, particularly those aimed at children, matters.
Spots can be trivialised or seen as acceptable to comment on. But acne can be a serious condition, challenging to treat, and sometimes leading to permanent scarring.

<div align="center">2</div>

There is extensive evidence of the effect it has on the mental health of those who have to live with it, including low mood, low self-esteem, negative body image, depression, and even suicidal thoughts.

Acne tends to strike during adolescence, at a time when we are uniquely vulnerable. In essence, if you look different then you are more susceptible to bullying and low self-esteem. Exposing children to characters such as Spotty at a young age normalises hurtful nicknames.

The use of physical characteristics to define fictional characters is widespread. In 2017, a study published in the British Journal of Dermatology found that 77 per cent of villainous characters in animated films had some form of skin condition or scarring – hardly a positive message to children who routinely have to live with conditions such as eczema and acne.

This sort of visual shorthand for evil is lazy storytelling. Perhaps it is not as in-your-face as a character named after his skin condition, but it is more insidious. It encourages children to unconsciously group people according to how they look. The Beano should be congratulated for challenging these physical stereotypes in line with cultural changes.

While acne may have previously been seen as a rite of passage, there is now increasing pressure to seek active treatments in a drive for "perfect" skin.

However, alongside these negative pressures, there is a more positive movement towards accepting diversity and "flaws". This is seen for example by the many influencers posting images of "no make-up selfies" and communities and movements such as #normaliseskinconditions.

This body positivity movement, largely driven by young people, is not comfortable with body shaming, including the use of names such as Spotty.

The Beano, first published in 1938, clearly knows what it is doing and listens to its readership. The comic remains popular, in no small part because of its ability to navigate changing perspectives, while always appealing to the next generation of children and young people.

Dr Tess McPherson is President of the British Society for Paediatric and Adolescent Dermatology.

Explain in your own words why the decision made by The Beano was criticized, and what Dr McPherson thinks of this criticism. (100 mots + ou - 10%)

III – Expression écrite

Rédigez un essai en anglais en 200 mots (±10 %) sur le sujet suivant :

Should we care so much about people's feelings? Justify your answer with examples wherever possible.

FIN DU SUJET

3

LANGUE VIVANTE OBLIGATOIRE : ANGLAIS
Durée : 2 heures

L'usage d'abaques, de tables, de calculatrice et de tout instrument électronique susceptible de permettre au candidat d'accéder à des données et de les traiter par les moyens autres que ceux fournis dans le sujet est interdit.

Chaque candidat est responsable de la vérification de son sujet d'épreuve : pagination et impression de chaque page. Ce contrôle doit être fait en début d'épreuve. En cas de doute, le candidat doit alerter au plus tôt le surveillant qui vérifiera et, éventuellement, remplacera le sujet.

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III – Expression écrite : 8 points sur 20

Vous indiquerez avec précision à la fin de la question de compréhension et de l'essai le nombre de mots qu'ils comportent. Un écart de 10 % en plus ou en moins sera accepté. Des points de pénalité seront soustraits en cas de non-respect de ces consignes

I – Thème

Traduisez le texte ci-dessous en anglais :

      La science est aujourd'hui soupçonnée d'avoir contribué à entraîner l'humanité sur une pente glissante, [...] Ainsi, 56 % des Français s'accordent à la trouver coupable.

      Coupable de quoi ? mais d'un peu tout : du réchauffement climatique tout d'abord, ensuite de l'automatisation qui détruirait l'emploi, sans oublier les menaces qui pourraient peser sur les libertés en conjuguant réseaux sociaux et intelligence artificielle, etc.

      Ce n'est pas la première fois que la science et la technologie font peur, mais les actualités récentes et le Covid ont donné à cette angoisse ancienne un relief nouveau. De la 5G aux robots, l'innovation est non seulement suspecte mais vue même comme néfaste...

      L'humanité dispose pourtant de bien peu d'outils pour faire face aux défis qui l'assaillent et la technologie en fait incontestablement partie. Elle est même un des seuls qui pourra nous permettre d'inventer un nouveau modèle de croissance soutenable, respectueuse de notre environnement et conjuguant modernité et sobriété.

Tribune de Paul Hermelin (Président du conseil d'administration de Capgemini),
lemonde.fr, 5 janvier 2022

II - Compréhension de l'écrit

Lisez le texte ci-dessous et répondez en anglais et en 100 mots (±10 %) à la question qui le suit (en caractères gras).

<u>Artificially intelligent advertising technology is poisoning our societies.</u>
By Ayad Akhtar, November 5, 2021, *The Atlantic* magazine

Something unnatural is afoot. Our affinities are increasingly no longer our own, but rather are selected for us for the purpose of automated economic gain. The automation of our cognition and the predictive power of technology to monetize our behavior, indeed our very thinking, is transforming not only our societies and discourse with one another, but also our very neurochemistry. It is a late chapter of a larger story, about the deepening incursion of mercantile thinking into the groundwater of our philosophical ideals. This technology is no longer just shaping the world around us, but actively remaking us from within.

That we are subject to the dominion of endless digital surveillance is not news. And yet, the sheer scale of the domination continues to defy our imaginative embrace. Virtually everything we do, everything we are, is transmuted now into digital information. Our movements in space, our breathing at night, our expenditures and viewing habits, our internet searches, our conversations in the kitchen and in the bedroom—all of it observed by no one in particular, all of it reduced to data parsed for the patterns that will predict our purchases.

But the model isn't simply predictive. It influences us. [...] Whether or not you are aware that you've seen a word, that word affects your decision making. This is the reason the technology works so well. [...] Otherwise known as advertising technology, this is the system behind the website banners, the promotions tab in your Gmail, the

2

Instagram Story you swipe through, the brand names glanced at in email headings, the words and images insinuated between posts in feeds of various sorts. The ads we don't particularly pay attention to shape us more than we know, part of the array of the platforms' sensory stimuli, all working in concert to adhere us more completely.

Adhesiveness. That's what the technology aspires to achieve, the metric by which it self-regulates and optimizes. The longer we stick around—on YouTube or Facebook, on Amazon, on the *New York Times* app—the deeper we scroll, the greater the yield of information, the more effective the influence. We are only starting to understand just how intentional all of this is, just how engineered for maximum engagement the platforms are. In fact, the platforms have been built, and are still being optimized, to keep us glued, to keep us engaged. [...]

John Stankey, the current CEO of AT&T, was unusually clear about this prime directive in 2018, as he addressed his new employees at the just-acquired HBO. "We need hours a day," Stankey said, referring to the time viewers spend watching HBO programs. "It's not hours a week, and it's not hours a month. We need hours a day. You are competing with devices that sit in people's hands that capture their attention every 15 minutes." Continuing the theme, Stankey added: "I want more hours of engagement. Why are more hours of engagement important? Because you get more data and information about a customer that then allows you to do things like monetize through alternate models of advertising as well as subscriptions." [...]

Use your own words to explain why, according to the columnist, technology is "remaking us from within". (100 mots + ou -10%)

III – Expression écrite

Rédigez un essai en anglais en 200 mots (±10 %) sur le sujet suivant :

Do you believe that we should fear or welcome our growing need for technology?

FIN DU SUJET

Banque PT

PHYSIQUE & TECHNOLOGIE

Epreuve de Langue Vivante A

Durée 3 h

Si, au cours de l'épreuve, un candidat repère ce qui lui semble être une erreur d'énoncé, d'une part il le signale au chef de salle, d'autre part il le signale sur sa copie et poursuit sa composition en indiquant les raisons des initiatives qu'il est amené à prendre.

Pour cette épreuve, l'usage de tout appareil électronique et dictionnaire est interdit.

CONSIGNES :

- Composer lisiblement sur les copies avec un stylo à bille à encre foncée : bleue ou noire.

- L'usage de stylo à friction, stylo plume, stylo feutre, liquide de correction et dérouleur de ruban correcteur est interdit.

- Remplir sur chaque copie en MAJUSCULES toutes vos informations d'identification : nom, prénom, numéro inscription, date de naissance, le libellé du concours, le libellé de l'épreuve et la session.

- Une feuille, dont l'entête n'a pas été intégralement renseigné, ne sera pas prise en compte.

- Il est interdit aux candidats de signer leur composition ou d'y mettre un signe quelconque pouvant indiquer sa provenance.

- <u>Les candidats qui ne composeraient pas dans la langue choisie au moment de leur inscription se verront attribuer la note zéro.</u>

Les différents sujets sous forme d'un fascicule sont présentés de la manière suivante :

Pages 2 à 6	Allemand
Pages 7 à 11	Anglais
Pages 12 à 17	Arabe
Pages 18 à 22	Espagnol
Pages 23 à 27	Italien

Tournez la page SVP

ANGLAIS

En vous appuyant uniquement sur les documents du dossier thématique qui vous est proposé, vous rédigerez une synthèse répondant à la question suivante :

« *How is control exerted by the various actors of the American surveillance society?* »

Votre synthèse comportera entre 450 et 500 mots. La synthèse devra être précédée d'un titre et les candidats devront indiquer le nombre de mots comptés en fin de copie.

Liste des documents :

1. "The Surveillance Society", Adam L. Penenberg, *Wired*, December 1, 2001

2. "As Orwell's 1984 Turns 70 It Predicted Much Of Today's Surveillance Society", Kalev Leetaru, forbes.com, May 6, 2019

3. "The Spying That Changed Big Tech", Shira Ovide, *The New York Times*, September 16, 2021

4. "Lawmakers From Both Sides Take Aim at Big Tech Executives", nytimes.com, July 29, 2020. Photograph by Graeme Jennings.

5. "Americans and Privacy: Concerned, Confused and Feeling Lack of Control Over Their Personal Information", Pew Research Center, November 15, 2019

Tournez la page S.V.P.

Document 1

The Surveillance Society
Adapted from Adam L. Penenberg, *Wired*, December 1, 2001

Within hours of the attacks on the World Trade Center and the Pentagon, Attorney General John Ashcroft pulled together a host of antiterrorism measures. Days later, the attorney general sent to Capitol Hill a bill that would make it easier for the government to tap cell phones and pagers, give the Feds broad authority to monitor email and Web browsing, strengthen money-laundering laws, and weaken immigrants' rights. And high above it all would sit an Office of Homeland Security, run by former Pennsylvania Governor Tom Ridge, who would report directly to the Oval Office[1].

The terrorist assault on America shifted the balance between privacy and security. What was considered Orwellian one week seemed perfectly reasonable - even necessary - the next. Politicians who routinely clashed now show complete agreement with one another. "When you're in this type of conflict – when you're at war – civil liberties are treated differently," said Senate Republican Trent Lott. "This event will change the balance between freedom and security," echoed House Democrat Richard Gephardt.

But truth be told, the US was embracing the Surveillance Society well before September 11. In the name of safety, we have grown increasingly comfortable with cameras monitoring us whenever we stop to buy a Slurpee, grab cash from an ATM, or park in a downtown lot. And in the name of convenience, we've happily accepted a range of products and services, from cell phones to credit cards to Web browsers that make our lives easier and have the secondary effect of permitting us to be tracked. They're not spy technologies - but they might as well be.

Americans don't seem to be frightened by these incursions. "Apparently, consumers don't feel their privacy is threatened," says Barbara Bellissimo, owner of a no longer existing website that offered anonymous Web browsing.

For now, the information about each of us resides in dozens of separate databases owned by the credit card companies, the phone carriers, the rental car agencies and police departments, the ISPs[2] and the IRS[3]. But the aftermath of September 11 could change all that by creating in many of us an appetite for information and a willingness to be monitored. And this raises a disquieting possibility: Will the disparate elements of our surveillance society be assembled into a surveillance web? Will the private companies and the government agencies come together to create a superdatabase accessible to ... who? Will it strip us not just of personal privacy – we seem resigned, even OK, with that – but of public anonymity?

Worrying is a waste of time. Surveillance is here. It was inevitable. But the surveillance state is not.

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[1] The Oval Office is the office of the President of the United States.
[2] Internet Service Providers
[3] "The Internal Revenue Service (IRS) is the revenue service of the United States federal government, which is responsible for collecting taxes." (https://en.wikipedia.org/wiki/Internal_Revenue_Service)

Document 2

As Orwell's *1984* Turns 70 It Predicted Much Of Today's Surveillance Society
Adapted from Kalev Leetaru, forbes.com, May 6, 2019

George Orwell's famous novel *Nineteen Eighty-Four* turns 70 years old next month. It turns out Orwell's predictions were frighteningly accurate.

In *1984*, it was the state that determined what constituted acceptable speech in keeping society orderly.

In 2019, it is a small cadre of private companies in Silicon Valley and their executives that wield absolute power over what we are permitted to see and say online.

In *1984*, there were just a few countries to which most of the world's citizens belonged.

In 2019, there are just a few social media empires to which most of the world's netizens belong.

In *1984*, it was the state that conducted surveillance and censored speech.

In 2019, social media companies deploy vast armies of human and algorithmic moderators that surveil their users 24/7, flagging those that commit thoughtcrimes[4] and deleting their violations from existence. Those that commit too many thoughtcrimes are banished to "unperson"[5] status by these same private companies, without any intervention or even in contradiction with the will of the state and without any right to appeal.

In *1984*, ever-present "telescreens" act as both information conveyor and surveillance device and saturate both public and private spaces with cameras and microphones monitored by the government.

In 2019, smartphones take on this role, acting as both our window to the digital world and the means through which myriad private companies from data brokers[6] to social media companies themselves surveil our every action. Yet, our world goes far beyond the one imagined by Orwell in which every device from our watches to our refrigerators, our thermostats to our toasters, are increasingly Internet-connected and streaming a realtime documentary of our lives back to these private surveillance empires.

In *1984*, it was the state that made use of its vast surveillance empire to maintain order.

In 2019, a landscape of private companies so large it is almost uncountable, monitors, monetizes and manipulates us.

In *1984*, the ultimate goal of the massive surveillance empire is to sustain and entrench the power of the state.

In 2019, the ultimate goal of the online world's massive surveillance empire is to sustain and entrench the power of social media companies.

Indeed, the similarities are nearly as endless as the words of the book.

Putting this all together, 70 years after *1984*'s publication, it seems nearly every aspect of Orwell's commentary on the surveillance state has come true. The only difference is that

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[4] In *Nineteen Eighty-Four*, committing thoughtcrime means "thinking something that violates the government's prescribed beliefs." (Jeffrey Somers, "'1984' Vocabulary", thoughtco.com, April 24, 2019)

[5] In *Nineteen Eighty-Four*, an unperson is "a person about whom all evidence of their existence is erased, typically after they are convicted of a crime and executed." (Jeffrey Somers, "'1984' Vocabulary", thoughtco.com, April 24, 2019)

[6] A data broker: "a person or company whose business is selling information about companies, markets, etc." (https://dictionary.cambridge.org/dictionary/english/data-broker)

Tournez la page S.V.P.

Orwell saw surveillance and control as the domain of the state, whereas in reality the surveillance world we have come to know is one of private companies monitoring, monetizing and manipulating society for nothing more than commercial gain.

Document 3

The Spying That Changed Big Tech
Adapted from Shira Ovide, *The New York Times*, September 16, 2021

The backlash against the industry traces back partly to the Snowden revelations.

I want to rewind to a recent point in history when the United States government snooped on American technology companies. It helps us more fully understand the current climate of mistrust between Big Tech, U.S. politicians and the American public.

In 2013, reporting by *The Washington Post* — based on documents from the former U.S. government contractor Edward J. Snowden — revealed that the National Security Agency and its British counterpart had essentially hacked a great deal of information from customers of Google, Yahoo and other American internet companies without those companies' knowledge.

Reasonable people can argue over whether the N.S.A. was justified in using this and other programs to siphon billions of pieces of information from phone calls, texts, emails and other digital records in the mission to defend the United States from terrorists. The reporting on the documents, by numerous news organizations, set off a public debate on the balance of privacy rights, the rule of law and national security.

I want to focus on the ways that those revelations of U.S. government snooping altered the technology that we use and ended the post-9/11 cooperation between the federal government and tech giants — for good and for ill.

First, that 2013 article in *The Washington Post* set off shock waves in Silicon Valley. Tech executives in public or (mostly) in private said that the N.S.A. hacking was a betrayal — a step way too far in the name of national security.

Tech company customers also worried about the possibility that information from their emails or sensitive documents might end up in the hands of U.S. spies — either through the tech companies' compliance with legal U.S. government orders or by sneaking through Big Tech's back doors.

The tech companies' most visible response was to bring secure technology into the mainstream. Companies including Google, Microsoft and Yahoo sped up their use of encrypted technologies that scramble the content of messages or phone calls so that anyone who snoops on them can access only gibberish.

Encryption is one of thorniest technologies in the world, because it both protects ordinary people's communications from prying eyes and makes criminals harder to track.

The trust gap between tech giants and leaders in the United States and other countries was probably inevitable, and in many ways it's healthy. Companies such as Google, Facebook, Amazon and Apple are so rich and their products are so essential in our lives that they have become nearly as powerful as governments. It's reasonable to weigh whether Big Tech needs more government oversight.

Tech companies are responsible for the enmity, yes, but the government's willingness to intrude on American companies is partly to blame, too.

Document 4

Lawmakers From Both Sides Take Aim at Big Tech Executives
nytimes.com, July 29, 2020
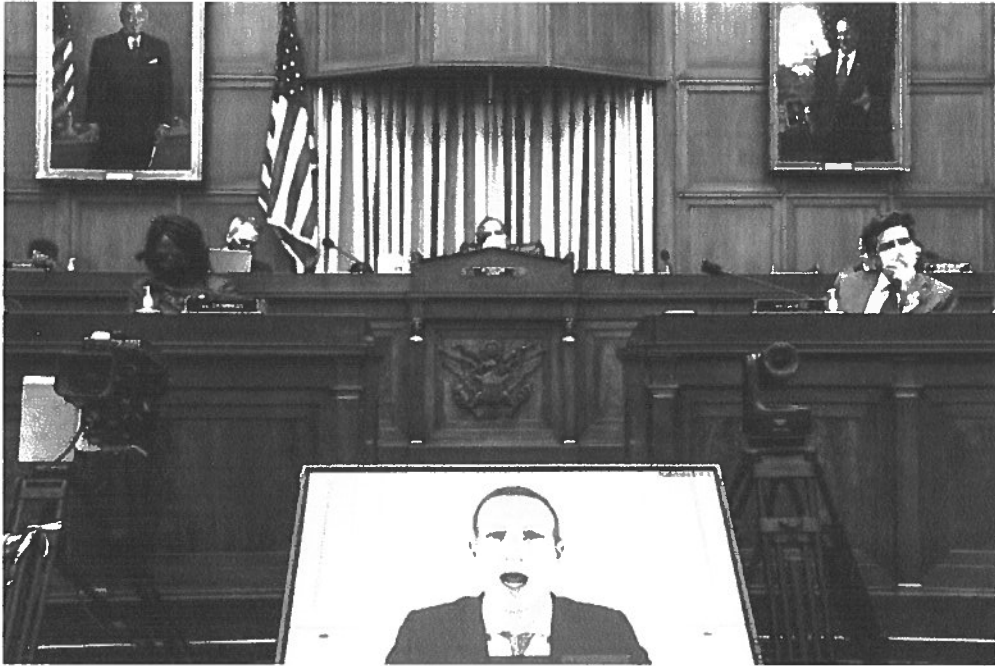
Mark Zuckerberg, the Facebook C.E.O., testifies before a US House of Representatives subcommittee. Photograph by Graeme Jennings

Document 5

Majority of Americans say they have little to no control over the data that companies or the government collect about them

% of U.S. adults who say they have ___ control over data collected about them by ...

	■ A great deal	■ Some	Very little	■ No
Companies	3	15	51	30
Government	4	12	41	43
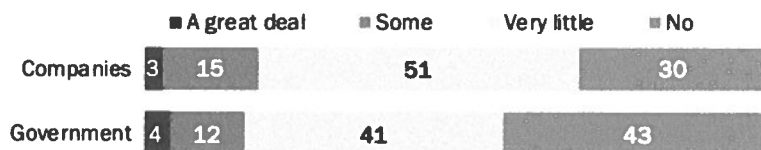
Note: Respondents were randomly assigned to answer a question about how much control they feel they have over data collected about them by "companies" or "the government." Those who did not give an answer are not shown.
Source: Survey conducted June 3 17, 2019.
"Americans and Privacy: Concerned, Confused and Feeling Lack of Control Over Their Personal Information"

PEW RESEARCH CENTER

"Americans and Privacy: Concerned, Confused and Feeling Lack of Control Over Their Personal Information"
Pew Research Center, Washington D.C., November 15, 2019

Tournez la page S.V.P.

Banque PT
PHYSIQUE & TECHNOLOGIE

Epreuve de Langue Vivante B

Durée 3 h

Si, au cours de l'épreuve, un candidat repère ce qui lui semble être une erreur d'énoncé, d'une part il le signale au chef de salle, d'autre part il le signale sur sa copie et poursuit sa composition en indiquant les raisons des initiatives qu'il est amené à prendre.

Pour cette épreuve, l'usage de tout appareil électronique et dictionnaire est interdit.

CONSIGNES :

- Composer lisiblement sur les copies avec un stylo à bille à encre foncée : bleue ou noire.

- L'usage de stylo à friction, stylo plume, stylo feutre, liquide de correction et dérouleur de ruban correcteur est interdit.

- Remplir sur chaque copie en MAJUSCULES toutes vos informations d'identification : nom, prénom, numéro inscription, date de naissance, le libellé du concours, le libellé de l'épreuve et la session.

- Une feuille, dont l'entête n'a pas été intégralement renseigné, ne sera pas prise en compte.

- Il est interdit aux candidats de signer leur composition ou d'y mettre un signe quelconque pouvant indiquer sa provenance.

- Les candidats qui ne composeraient pas dans la langue choisie au moment de leur inscription se verront attribuer la note zéro.

Tournez la page SVP

II. Contracter le texte suivant en 130 mots (+/- 10%), dans la langue vivante choisie :

Dans un monde futuriste, une jeune femme se retrouvait prise au piège au milieu d'une guerre entre deux peuples. C'est le scénario du livre d'une auteure américaine, Keira Drake, qui devait publier son premier roman pour adolescents, *The Continent*. Mais quand sont diffusés quelques extraits, c'est la catastrophe : « Raciste ! », lui reproche-t-on sur Twitter. En cause ? L'un des peuples ressemble un peu trop aux Amérindiens, et l'autre, aux Japonais, et chacun serait présenté de manière trop stéréotypée. Que fait l'auteure ? Elle demande elle-même à son éditeur de ne pas publier et présente ses plus plates excuses. [...] Pendant six mois, elle fait appel à deux *sensitivity readers* pour réécrire son livre. Et les peuples à la « *belle peau bronzée* » ou celui à la « *peau brun rougeâtre et aux visages peints* » voient leur carnation devenir toute blanche dans la nouvelle version, parue en 2018 aux États-Unis.

Comment sont apparus ces *sensitivity readers* ? Depuis trois, quatre ans, ils sont consultés de plus en plus par les éditeurs américains, notamment pour les romans destinés aux adolescents. Une base de données de 250 de ces relecteurs a même été créée en 2016, intitulée *Writing in the Margins* (« écrire dans les marges »). Ils étaient présentés par spécialités, selon leur propre identité : « femme queer », « métis bisexuel », ou encore « juif orthodoxe »... C'est Justina Ireland, elle-même écrivaine, qui les a rassemblés, et elle expliquait dans une tribune « *avoir plaidé pour que les éditeurs et auteurs utilisent ces relecteurs comme un moyen de se rapprocher de la vérité compliquée de ce que signifie une personne marginalisée* ». [...]

« *Le vrai problème derrière les* sensitivity readers, *ce sont les meutes numériques*, analyse Laurent Dubreuil, professeur d'université aux États-Unis et auteur de *La Dictature des identités* (éd. Gallimard). *Trente personnes organisées sur les réseaux sociaux peuvent suffire.* » Elles n'ont souvent pas lu elles-mêmes le livre en question, mais agissent de manière mécanique. « *Et, la plupart du temps, l'auteur décide* « de lui-même » *de retirer son livre et présente des excuses publiques*, souligne-t-il. *On n'est pas loin de ce qui se passait pendant la Révolution culturelle en Chine. La rhétorique est exactement la même, en termes de contrition. L'objectif, c'est l'autocensure intégrée.* » [...]

Ces « justiciers » du Web défendent souvent l'idée – contraire même à la littérature – que l'on ne pourrait écrire que sur ce que l'on connaît intimement. [...]

Cette recherche d'une « pureté » des idées qui fait directement tomber dans la mauvaise case si on ose exprimer une autre voix, l'écrivain irlandais John Boyne l'a aussi subie de plein fouet. Son roman *My Brother's Name is Jessica,* publié en 2019, raconte l'histoire d'un adolescent dont la sœur est transgenre. Son objectif était notamment de soutenir le combat des jeunes trans et d'encourager leurs proches à être bienveillants envers eux, nous explique-t-il. A priori positif ? Que nenni. Lui-même étant gay, pas transgenre, certains lui ont reproché de parler de ce qu'il ne connaissait pas. Il a pourtant lui aussi fait appel à un *sensitivity reader*, notamment pour comprendre les effets du traitement hormonal sur le corps. Mais, dans un article publié dans l'Irish Times avant la publication du livre, il a osé dire qu'il rejetait le terme « cis », utilisé par plusieurs militants LGBT pour désigner les personnes qui ne sont pas transgenres [...]. Il n'en a pas fallu davantage pour que les réseaux sociaux s'abattent sur lui. [...] Il se dit inquiet pour la liberté d'expression des jeunes auteurs : « *Un auteur plus jeune pourrait vivre dans la peur d'une telle polémique et, pour l'éviter, se mettre à produire une œuvre sans imagination et sans audace. Un écrivain doit écrire ce qu'il veut écrire. Le public peut y répondre comme il le souhaite, mais il ne faut jamais en tenir compte lors de l'élaboration d'un roman.* »

Qu'en est-il en France ? Certains auteurs pour la jeunesse, comme Marie-Aude Murail, commencent aussi à sentir la pression du politiquement correct. « *Ce qui vient des pays anglo-saxons finira par arriver* », nous dit-elle. [...] Elle se heurte de plus en plus souvent à une difficulté : « *Certains ne savent plus lire, on attribue à l'auteur les propos qui sont ceux d'un personnage.* » Elle a même failli ajouter un avertissement dans son prochain livre : « *Les*

personnages de ce roman n'expriment pas l'opinion de l'auteure mais la leur. » Le b.a.-ba de l'écriture. Puis elle s'est dit : je fais confiance à mes lecteurs. Et si c'était la solution ?

Charlie Hebdo, Laure Daussy le 9 janvier 2020

II. Répondre à la question suivante en 200 à 220 mots, dans la langue choisie :

ALLEMAND
Denken Sie, dass die sozialen Netzwerke dabei sind, uns eine neue moralische Ordnung aufzuzwingen? Begründen Sie Ihre Antwort.

ANGLAIS
Do you think social networks are currently imposing a new moral order? Justify your answer.

ARABE
هل تعتقد أن وسائل التواصل الاجتماعي تملي علينا نظامًا أخلاقيًا جديدًا؟ دعّم إجابتك بالأمثلة

ESPAGNOL
¿Piensa usted que las redes sociales están dictando un nuevo orden moral? Justifique sur respuesta.

ITALIEN
Pensate che le reti sociali stiano dettando un nuovo ordine morale? Giustificate la vostra risposta.

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