



**Passage 1**

Oliver Burkeman writes...

- 1 29 October 1969 has been asserted as the day “the infant Internet uttered its first words” 1  
 when a computer made contact with a second one, miles away at the Stanford Research  
 Institute, and an undergraduate, Charley Kline, tapped out a message. To say that the  
 rest is history is the emptiest of clichés but trying to express the magnitude of what has  
 really happened since is an undertaking that exposes the limits of language. Twelve 5  
 years after Kline's first message on the Arpanet, as it was then known, only 213  
 computers were on the network but 14 years later, 16 million people were online, and  
 email was beginning to transform the world. The first really utilizable web browser was  
 not launched until 1993, but by 1995 we had Amazon, by 1998 Google, and by 2001,  
 Wikipedia, at which point there were 513 million people online. Today, the figure is 1.7 10  
 billion.
  
- 2 Unless you are 15 years old or younger, you have lived through the dotcom bubble and 15  
 bust: the birth of Friendster, eBay, Facebook, Twitter and blogging, the browser wars,  
 Google Earth, and file-sharing controversies. You would also have seen the  
 transformation of the music industry, consumer banking, travel agencies, dating and  
 retail. In the entire history of mankind, nothing has changed so dramatically as computer  
 communications.
  
- 3 On the other hand, the breakthrough in 1969 was decidedly down-to-earth. The Arpanet 20  
 was not intrinsically intended as a secret weapon to humble the Soviets but simply to  
 enable researchers to access computers remotely, because computers were still vast  
 and expensive, and the scientists needed a way to share resources. Linking computers  
 by telephone lines was possible but glacially slow. As every computer in the network  
 must be connected, by a dedicated line, to every other, you could not connect more than  
 a handful of machines without everything becoming monstrously complex and costly. The  
 solution was “packet switching” – breaking data down in blocks that could be routed 25  
 around any part of the network that happened to be free, before getting reassembled at  
 the other end.
  
- 4 One of the most intriguing aspects about the growth of the Internet is this: to a select 30  
 group of technological thinkers, the surprise was not how quickly it spread globally,  
 remaking business, culture and politics – but that it took so long to get underway. Even  
 when computers were mainly run on punch-cards and paper tape, there were whispers  
 that they would work in a network, rather than individually. In 1945, the American  
 presidential science adviser, Vannevar Bush, was already envisaging the “memex”, a  
 device in which “an individual stores all his books, records, and communications”, which 35  
 would be linked to each other by “a mesh of associative trails”, like web links. While  
 these seemed to have spurred on and shaped the evolution of the Internet, others had  
 frenzied visions of the world's machines turning into a kind of conscious brain.
  
- 5 Despite all these predictions, the arrival of the Internet was never a matter of inevitability. 40  
 It was a crucial idiosyncrasy of the Arpanet that its funding came from the American  
 military – but that the millions ended up on university campuses, with researchers who  
 embraced an anti-establishment ethic. Instead of smothering their research in the utmost  
 secrecy – as expected of a cold war project aimed at winning a technological battle  
 against Moscow – they publicised every step of their thinking, in documents known as

- 'Requests For Comments'. Deliberately or not, these researchers helped encourage a vibrant culture of hobbyists on the fringes of academia – students and rank amateurs who built their own electronic bulletin-board systems and eventually FidoNet, a network to connect them to each other. Arguably, these instances of unofficial tinkering did as much to make the Internet a public platform. The hobbyists, by making unofficial connections into the main system, were the first to open the Internet up to all comers. 45
- 6 And so without most of us quite noticing when it happened, the web went from being a new curiosity to a background condition of everyday life: I have no memory of there being an intermediate stage, when, say, half the information I needed on a particular topic could be found online, while the other half still required visits to libraries. 50
- 7 It is absurd to compact the series of events into a few phrases: the dotcom boom, the unprecedented dotcom bust, the growing "digital divide", and then the flourishing, over the last seven years, of Web 2.0. It is only this latter period that has revealed the true capacity of the web for "generativity": for the sharing of blogs, podcasts and videos by anyone with access to the Internet, for the undermining of totalitarian regimes and organisation of political resistance via radicalised websites, and for the use of sites such as Twitter and Facebook to create (and ruin) friendships, and spread fashions and rumours. But you almost certainly know all this: it is part of what, in many parts of the world, we now call "just being alive". 55 60

## Passage 2

Peter Singer writes...

- 1 Google's decision to stop acceding to the Chinese government's request to block its citizens' access to websites deemed unacceptable has been greeted with enthusiasm in liberal democracies worldwide. But the Australian government recently proposed legislation to forbid websites containing material on child pornography, bestiality, incest, graphic "high-impact" images of violence, instructions on crime, detailed descriptions of the use of proscribed drugs, and how-to information on suicide for the terminally ill. A readers' poll in the Sydney Morning Herald showed 96% opposed to those proposed measures and only 2% in favour. More readers voted than in any previous poll shown on the newspaper's website, and the result is the most one-sided. 5
- 2 The Internet, like the steam engine, is a technological breakthrough that changed the world. Today, an Internet connection offers, at your fingertips, an amount of information previously available only to those with access to the world's greatest libraries. Indeed, what is available through the Internet dwarfs those libraries, and it is easier to find what you need. Remarkably, this came about with no central planning, no governing body, and no overall control, other than a system for allocating the names of websites and their addresses. 10 15
- 3 That something so significant could spring up independently of governments and big business led many to believe that the Internet can bring the world a new type of freedom. It is as if an inherently decentralised and individualist technology had realised an anarchist vision that would have seemed utterly utopian. That may explain why so many people believe intensely that the Internet should be left completely unfettered. Perhaps because Google has been all about making information more widely available, its 20

collaboration with China's official Internet censors has been seen as a deep betrayal. The hope of Internet anarchists was that repressive governments would have only two options: accept the Internet with its limitless possibilities of spreading information, or restrict Internet access to the ruling elite and turn their backs on the 21st century, as North Korea has done. Reality is more complex. The Chinese government was never going to yield to Google's demand that it abandon Internet censorship. The authorities will undoubtedly find ways of replacing the services that Google provided – at some cost, and maybe with some loss of efficiency, but the Internet will remain fettered in China.

- 4 Even with censorship, the Internet is a force for change. Just the month before, when the governor of China's Hubei province threatened a journalist and grabbed her recorder after she queried about a local scandal, journalists, lawyers and academics used the Internet to object. A web report critical of the governor's behaviour stayed up for 18 hours before censors ordered it taken down. By then, the news was already widely dispersed. Likewise, in Cuba, Yoani Sánchez's blog 'Generation Y' has broken barriers that conventional media could not. Although the Cuban government has blocked access to the website on which the blog is posted, it is available around the world in many languages, and distributed within Cuba on CDs and flash drives.
- 5 The new freedom of expression brought by the Internet goes far beyond politics. People relate to each other in new ways, posing questions about how we should respond to people when all that we know about them is what we have learned through a medium that permits all kinds of anonymity and deception. We discover new things about what people want to do and how they want to connect to each other. Do you live in an isolated village and have unusual hobbies, special interests, or sexual preferences? You will find someone online with whom to share them. Can't get to a doctor? You can check your symptoms online – but can you be sure that the medical website you are accessing is reliable? Technology can be used for good or for bad, and it is too soon to reach a verdict on the Internet. In the 18th century, who could have foreseen that the development of the steam engine would have an impact on earth's climate? Even if the Internet does not fulfil the anarchist dream of ending repressive government, we are still only beginning to grasp the extent of what it will do to the way we live.

Read the passages and then answer **all** the questions which follow. Note that up to fifteen marks will be given for the quality and accuracy of your use of English throughout this paper.

For  
Examiner's  
Use

NOTE: When a question asks for an answer IN YOUR OWN WORDS AS FAR AS POSSIBLE and you select the appropriate material from the passage for your answer, you must still use your own words to express it. Little credit can be given to answers which only copy words and phrases from the passage.

### From Passage 1

1. Explain what the author means by "the infant Internet uttered its first words" (line 1).

[1]

2. What does the author imply by stating that "trying to express the magnitude of what has really happened since is an undertaking that quickly exposes the limits of language" (lines 4-5)?

[2]

3. Using your own words as far as possible, explain the author's claim in paragraph 6.

[2]

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*One of the factors contributing to the development of the Internet .....*

[illegible]

[8]

**From Passage 2**

6. In paragraph 1, what do the findings of the poll indicate about the readers' attitude towards the websites disapproved by the Australian government?

[1]

7. "...what is available through the Internet dwarfs those libraries" (line 13). Explain why the writer uses the word 'dwarfs'.

[1]

8. How has Yoani Sánchez's blog "broken barriers that conventional media could not" (lines 36-37)? **Use your own words as far as possible.**

[3]

9. "The new freedom of expression brought about by the Internet goes far beyond politics" (line 40). Cite **two** forms of the new freedom of expression and their implications.

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[2]

**From both passages**

10. Give the meaning of the following words as they are used in the passage.

Write your answer in one word or a short phrase.

a. dramatically (Passage 1, line 16) \_\_\_\_\_ [1]

b. compact (Passage 1, line 54) \_\_\_\_\_ [1]

c. unprecedented (Passage 1, line 55) \_\_\_\_\_ [1]

d. anarchist (Passage 2, line 20) \_\_\_\_\_ [1]

e. fettered (Passage 2, line 30) \_\_\_\_\_ [1]

[Total: 5]



11. With reference to the arguments from both passages, consider how the Internet has been harnessed in your society and whether it has led to similar problems.

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[illegible]

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