

CHAPTER 2

TECHNOLOGY IN SOCIETY: A HISTORICAL OVERVIEW

Multiple Choice Questions

1. When did the Stone Age occur?
 - a) 1 billion years ago
 - b) 39 million years ago
 - c) 2.6 million years ago
 - d) 400,000 years ago
2. What does “material culture” refer to?
 - a) The interrelation that exists between an artifact and the society that uses it
 - b) The isolation required by inventors in order to create complex new technologies
 - c) The pervasiveness of technology in contemporary society
 - d) The study of the physical aspects of tools divorced from their influence on norms, attitudes, or behaviours
3. Which of the following terms was introduced to describe the actions that workers took against the technologies that replaced them during the Industrial Revolution?
 - a) Mechanism sabotaging
 - b) Tech striking
 - c) Machine breaking
 - d) Steel stealing
4. The Agricultural Revolution was a key transition from hunter-gatherers to horticultural societies. What is needed for horticultural societies to be successful?
 - a) They require citizens to be wary of potential enemies who can copy their innovation
 - b) They need a place to settle that integrates different eco-systems
 - c) They require a highly hierarchical form of organization to thrive
 - d) They require individuals to plan and organize themselves
5. Which of the following areas of study had an impact on building construction in Greece and in Rome?
 - a) Perspective effects
 - b) The aqueducts
 - c) Scientific method
 - d) Greek philosophy

6. Which statement applies to low-definition media?
 - a) It offers users a greater degree of mobility and reach
 - b) It provides users with less information and thus requires a greater participation from the senses in order to be understood
 - c) It engages a single sense at lower sensory levels
 - d) It disproves the link between mass media production and consumption and the emergence of a mass audience
7. Amazon's primary reason for using a robot workforce to move products from one location to another in the warehouse is:
 - a) reduce human error
 - b) reduce cost
 - c) increase efficiency during peak shipping
 - d) increase overall revenue
8. Which of the following describes swarm drones?
 - a) Colonies of armed drones that can attack an entire army from a distance
 - b) Coordinated drones that carry spying equipment
 - c) Coordinated drones that can rescue military personnel
 - d) Colonies of armed drones that act in a coordinated fashion in war zones
9. McLuhan differentiated between hot and cool/cold media, which of the following is a good example of a cool/cold medium?
 - a) E-book
 - b) Magazine
 - c) Book
 - d) Television
10. Why is tool use an example of an evolutionary model of technological development?
 - a) Tools build upon existing knowledge
 - b) Tools are the products of inventors working in isolation
 - c) Tools are the pure creations of theory and ingenuity
 - d) Tools have their own agency and cannot be controlled
11. Which of the following is considered a technological innovation leading to the Neolithic period?
 - a) Cave painting
 - b) Agriculture
 - c) Marriage ritual
 - d) Animal butchery
12. Which of the following technologies is a good example of time acceleration?
 - a) Data science
 - b) Printing press
 - c) Giant magnetoresistance (GMR)
 - d) Smartphones

13. What was one of the most important tools arising from the technological revolution of the mid-fifteenth century?
- a) The illuminated manuscript
 - b) The Chinese woodblock print
 - c) The hand-copied book
 - d) The Gutenberg printing press
14. Who was one of the first scholars to draw attention to mass media's effects on society?
- a) Denis Diderot
 - b) Albert Bandura
 - c) Marshall McLuhan
 - d) Paul Moore
15. Which of the following scenarios is the best example of the phrase "the medium is the message"?
- a) A couple watches the same TV show at the same time every week.
 - b) Regardless of what a child is watching on TV, the fact that the child is watching TV is what determines the effect on the child and on family dynamics.
 - c) A teenager listens to music while performing other tasks, such as sitting in class and eating dinner at the table.
 - d) A group of children prefers to stay home and play video games together rather than enrolling in league sports such as soccer or baseball.
16. Which of the following is an example of "hot" media?
- a) Books
 - b) Cartoons
 - c) Watching TV
 - d) Attending a seminar
17. Statista reports that the time people spent watching television is down. How much time did people spend watching TV in 2018?
- a) 270 minutes of TV per day
 - b) 350 minutes of TV per day
 - c) 150 minutes of TV per day
 - d) 90 minutes of TV per day
18. Canadian media scholar Marshall McLuhan has said that society tends to approach technological developments by marching backwards into the future. This is referred to as:
- a) Technological determinism
 - b) Rear-view mirror approach
 - c) Time acceleration
 - d) Data science
19. Amazon is a global ecommerce giant. Yet, Amazon has had to deal with different regulations in different countries. Which of the following countries has been imposing a

strong regulatory framework on Amazon, complicating their business operations?

- a) China
- b) US
- c) France
- d) Canada

20. Which of the following terms describes this characteristic of big data: the accuracy, reliability, and quality of the data?

- a) Virtue
- b) Volume
- c) Veracity
- d) Value

True or False Questions

1. Scholars of the history of technology acknowledge that tools build on existing knowledge, making technological development an evolutionary, rather than a revolutionary, process.
2. A coin and its role in buying goods and services is an example of material culture.
3. The earliest evidence of technology dates back to the use of tools in the Neolithic period.
4. Both agriculture and domestication of animals are considered technological inventions.
5. In sedentary societies, individuals all have the same role, leading to a strong sense of community.
6. The driving force behind basic research is the idea of scientific inquiry as it relates to practical applications.
7. Data rather than oil is described as the raw material of the 21st Century.
8. Virtue describes the accuracy, reliability, and quality of the data.
9. Giant magnetoresistance (GMR) is an example of time acceleration.

Short Answer Questions

1. What does it mean if something is said to have followed an evolutionary model of technological development?

2. Define technology transfer, giving an example of this happening within a trade, and also across trades.
3. Explain what Marshall McLuhan meant when he said, "The medium is the message."
4. What characterizes the period of time acceleration?
5. How are high- and low-definition media different? Use examples to illustrate your response.

Long Answer Questions

1. A key invention of the Renaissance is the development by Johannes Gutenberg of the printing press. How did the printing press impact society at the time? What were the key changes that occurred? Do you think this is an example of technological determinism? Why? Or why not?
2. Big data and data science are becoming an integral part of governance. What are the main advantages of using a big data approach to solving societal problems? What are some of the negative aspects of big data approaches? Also, discuss ethical issues.

ANSWER KEY

Multiple Choice Questions

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|------------------|------------------|------------------|
| 1. c (p. 27) | 8. d (p. 37) | 15. b (p. 39) |
| 2. a (p. 27) | 9. d (p. 40) | 16. a (p. 40) |
| 3. c (p. 38) | 10. a (p. 25–26) | 17. a (p. 39–40) |
| 4. d (p. 29) | 11. b (p. 29) | 18. b (p. 41) |
| 5. a (p. 32) | 12. c (p. 44) | 19. c (p. 46) |
| 6. b (p. 40) | 13. d (p. 33) | 20. c (p. 43) |
| 7. c (pp. 25–26) | 14. c (p. 39) | |

True or False Questions

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| 1. T (p. 27) | 4. T (p. 29) | 7. T (p. 42) |
| 2. T (pp. 27–28) | 5. F (p. 31) | 8. F (p. 43) |
| 3. F (p. 28) | 6. F (p. 32) | 9. T (pp. 44–45) |