

## PART I

*Text 1*

(1)It is often said as a matter of conventional wisdom that “ Necessity is the mother of invention ” . That is, inventions supposedly arise when a society has an unfulfilled need and imaginative people who, perhaps motivated by the prospect of money or fame, perceive the need and try to meet it. After a time, some inventor comes up with a  
5 solution superior to the existing, unsatisfactory technology. (2)Finally, society adopts the solution, as long as it is compatible with the society ’ s values and other technologies.

(3)Quite a few inventions do conform to this common-sense view of necessity as leading to invention. Some instances are Eli Whitney ’ s 1794 invention of the cotton gin to replace the laborious hand cleaning of cotton grown in the U.S. South, and James  
10 Watt ’ s 1769 invention of the steam engine to solve the problem of pumping water out of British coal mines. But these familiar examples deceive us into supposing that other major inventions were also responses to perceived needs. (4)In fact, many, if not most, inventions are developed by people driven by curiosity or by a love of making new things, in the absence of any initial demand for the innovation they had in mind. Other devices,  
15 invented to serve one purpose, eventually end up being used for other, unforeseen purposes. These inventions include most of the major technological innovations of modern times, ranging from the airplane and automobile to the phonograph and transistor. Thus, invention is often the mother of necessity, rather than vice versa.

A prime example is the history of Thomas Edison ’ s phonograph, perhaps the most  
20 original invention of modern times. When Edison built his first phonograph in 1877, he published an article proposing ten uses to which his invention might be put. They

included preserving the last words of dying people, recording books for blind people to hear, announcing clock time, and teaching spelling. Depressed by his invention 's lack of immediate application, Edison told his assistant that the phonograph apparently had  
25 no commercial value. Twenty years later, Edison conceded, with reluctance, that the main use of his phonograph was to record and play music not a very significant use, in his opinion.

The motor vehicle, another invention whose uses seem obvious today, was not invented in response to any demand. In 1866 when Nikolaus Otto built his first gas  
30 engine a heavy, inefficient, seven-foot tall monster horses had been supplying people ' s land transportation needs for nearly 6,000 years. Between 1885 and 1896 there was no crisis in the availability of horses, but this did not stop Gottfried Daimler from using the gas engine to invent the motorcycle and the truck. In 1905, even after 40 years of improvements, motor vehicles were still expensive, unreliable toys for the rich.  
35 In fact, public satisfaction with horses and steam-driven trains remained high until World War , when the military concluded that it really did need trucks. It intensive postwar efforts together with those made by truck manufactures finally convinced the public of its own needs and enabled trucks to begin to replace horse-drawn wagons in industrialized countries. But even in the largest American cities, the changeover took  
40 50 years

46. In the first paragraph, why does the writer use the quotation, “Necessity is the mother of invention”?
- a . To suggest that one invention necessarily follows from another.
  - b . To illustrate a widely held belief about inventing.
  - c . To show that a society ’ s needs are like a mother ’ s need for a child.
  - d . To indicate that inventions are not guided by conventional wisdom.
47. Which of the numbered sentences in the first two paragraphs best presents the writer ’ s main point?
- a . (1)
  - b . (2)
  - c . (3)
  - d . (4)
48. The word “driven” underlined in the second paragraph could best be replaced with which of the following?
- a . appreciated
  - b . conceived
  - c . controlled
  - d . motivated
49. Which of the words below is closest in meaning to the word “unforeseen” underlined in the second paragraph?
- a . hidden
  - b . irregular
  - c . unanticipated
  - d . visionary
50. In the last line of the second paragraph, what is meant by the statement “invention is often the mother of necessity”?
- a . Inventions are often created to fulfill society ’ s needs.
  - b . Inventors tend to think of their innovations as their “children.”
  - c . Technology leads to more and more technology.
  - d . Technological innovations frequently create new needs.

51. What does the word “ prime ” underlined in line 1 of paragraph three mean?
- a . first
  - b . good
  - c . primal
  - d . prior
52. How did Edison apparently view the use of phonograph for music?
- a . With disappointment.
  - b . With enthusiasm.
  - c . With pride.
  - d . With shame.
53. Which of the following is described as a “ seven-foot tall monster ” ?
- a . The first motor vehicle.
  - b . The inventor of the truck.
  - c . The first gas engine.
  - d . Horses that pull wagons.
54. According to the writer , which of the following is the best example of something created to meet a need?
- a . The phonograph.
  - b . The gas engine.
  - c . The transistor.
  - d . The steam engine.
55. What is the changeover mentioned in the last sentence of the passage?
- a . The change from horse-drawn wagons to gas-powered vehicles.
  - b . The change from steam engines to gas engines.
  - c . The shift from public transportation to private transportation.
  - d . The replacing of military vehicles with civilian ones.

*Text 2*

The three basic strategies underlying writing systems around the world differ according to the unit of speech that is represented by one written symbol: this symbol may represent a single sound, a whole syllable, or a whole word. The most commonly used approach to written language is the alphabet. Ideally, an alphabetic system provides a unique letter for each phoneme, or, "sound," of the language. However, most alphabets consist of approximately 20-30 letters, and most languages have more phonemes than letters. For example, English represents about 40 phonemes with a mere 26 letters. Hence, most alphabetically written languages are forced to assign several different phonemes to the same letter and to represent some phonemes by combinations of letters, such as the English two-letter combinations *sh* and *th*.


The second strategy uses a sign for each syllable. In practice, most such writing systems termed syllabaries provide distinct signs only for syllables of one consonant followed by one vowel, such as "ma" or "ki." When necessary, they resort to various tricks to write other types of syllables by means of those signs. Among the syllabaries in use today, perhaps the Japanese *kana* syllabaries *hiragana* and *katakana* are most important.

The third strategy uses logograms, meaning that one written sign, not made up of phonetic elements, stands for a whole word. That is the function of many of the character signs of Chinese writing, the *kanji* writing system in Japanese, and the now extinct systems of Egyptian hieroglyphs and Sumerian cuneiform. In fact, before the spread of alphabetic writing, logograms were much more common.

No actual writing system employs one strategy exclusively. Chinese writing is not

purely logographic, nor is English writing purely alphabetic. Like all alphabetic writing systems, English uses many logograms, such as \$, %, +, and of course all the numerals  
25 1, 2, 45, etc. The syllabic writing system of Mycenaean Greece had many logograms, representing whole words, and logographic Egyptian hieroglyphs included many syllabic signs as well as a virtual alphabet of letters for each consonant.

When linguists today prepare a new writing system for a previously unwritten language, alphabets are usually adopted because they are the most flexible and widely  
30 applicable of the three strategies. Even so, many decisions about what sounds should be represented by specific symbols can be controversial. For example, the debate over whether the alphabet for Quechua, a language in Peru, should have three or five vowels reflected some important social and political divisions in Peruvian society. Even though such decisions may be complicated by issues that go beyond language, alphabets will  
35 probably continue to be used when human languages are recorded in writing for the first time.

56. What is the writer's main purpose in this passage?
- a . To show that alphabets should replace other writing strategies.
  - b . To argue that new approaches to writing systems need to be developed.
  - c . To introduce the most common strategies used to write the world's languages
  - d . To prove that most writing systems in the world are combinations of various signs.
57. According to the writer, what is the basis for distinguishing the three different approaches to writing?
- a . The kind of speech unit represented by a written symbol.
  - b . The relative complexity of the symbols used to represent words.
  - c . The overall proportion of consonants to vowels.
  - d . The total number of signs needed to represent a language.
58. What does the word they underlined in the second paragraph refer to?
- a . Writing systems in general.
  - b . Distinct signs in particular.
  - c . Most syllabaries.
  - d . Some strategies.
59. Which of the following claims does the writer make about syllabaries?
- a . They tend to have separate signs only for "consonant plus vowel" syllables.
  - b . They are more efficient to write than alphabetic systems.
  - c . Because they are able to use tricks, they continue to be used today.
  - d . They are more stable than logographic or alphabetic systems.
60. Which of the following symbols is an illustration of an English logogram?
- a. =
  - b. ☞
  - c. ❖
  - d. 

61. According to the writer, why was it difficult to decide whether the Quechua alphabet should have three or five vowels?
- a . The decision involved matters that went beyond language.
  - b . Linguists have little experience changing logographic systems to alphabetic ones.
  - c . Quechua is too much like other Peruvian languages.
  - d . There were no longer any native speakers to consult about the decision.
62. The underlined word "employs" in the fourth paragraph could best be replaced with which of the following?
- a . hires
  - b . uses
  - c . works
  - d . develops
63. What do Chinese, English, Mycenaean Greek, and Egyptian hieroglyphic writing systems have in common?
- a . All began as logographic systems.
  - b . All began as syllabaries.
  - c . All employ a combination of writing systems.
  - d . All can be considered "pure" writing systems.
64. Which of the following sets of words reflects the imbalance between the number of phonemes and the number of letters in English?
- a . car, camel, curtain
  - b . beat, blue, break
  - c . cry, try, pry
  - d . ate, father, hat
65. What might the writer of this passage consider the *hiragana* symbol "っ" as used in the word "やっぱり" to be an example of?
- a . The resistance of a syllabic system to change.
  - b . Logographic influence in a syllabic writing system.
  - c . The need for a syllabic trick in Japanese.
  - d . The superiority of syllabic writing systems.



## PART II

History is about people. We have records of one kind or (66) that extend back (67) five millennia and which (68) countless wars between nations, the rise and fall of kings, natural disasters and great human (69) . The overall impression' is one of constant change, with even the greatest rulers (70) so completely that the only  
 5 evidence of their ever having existed at all is preserved (71) in archeological remains.

(72) the shifting patterns of human history, however, and influencing every subtle variation, is the guiding force (73) the physical characteristics of the Earth; what we (74) the "topographic influence." The British are and like (75) themselves as an island nation. (76) , in the geologically recent past, Britain was joined to Europe by  
 10 a broad land bridge. How different British history (77) if that bridge had not been submerged (78) the grey waters of the English Channel!

Topography works on a much finer scale, too, (79) where we live and work. The city of London grew up where it did (80) , in pre-Roman days, it was the lowest point on the Thames where the river could (81) be crossed. Although technology has come  
 15 (82) since then, and London has spread enormously, the great gash (83) the Thames estuary makes into the east coast of Britain (84) a formidable obstacle to travel. In modern times, the Thames has again been bridged, this time a few kilometers (85) downstream than in Roman days, and London still exists in the same place.

66. a . another  
b . one other  
c . some other  
d . the other
67. a . into  
b . on  
c . over  
d . up
68. a . determine  
b . document  
c . tolerate  
d . torture
69. a . achievements  
b . conveniences  
c . estimations  
d . predictions
70. a . arranged for  
b . dominant over  
c . fading away  
d . hanging on
71. a . by chance  
b . in time  
c . to save  
d . with some
72. a . Applying  
b . Simulating  
c . Underlying  
d . Withdrawing
73. a . by  
b . of  
c . on  
d . to
74. a . can say  
b . have said  
c . might call  
d . will tell
75. a . as thought of  
b . thinking by  
c . to think by  
d . to think of
76. a . Besides  
b . However  
c . In addition  
d . So
77. a . changed around  
b . had been before  
c . should be again  
d . would have been
78. a . across  
b . atop  
c . beneath  
d . beside
79. a . influenced by  
b . influencing  
c . influential on  
d . with influence
80. a . became  
b . because  
c . before  
d . belong
81. a . convenience  
b . conveniency  
c . convenient  
d . conveniently
82. a . a long way  
b . far along  
c . far away  
d . on the way
83. a . for  
b . from  
c . of  
d . that
84. a . is constituting  
b . it constitutes  
c . still constitutes  
d . will constitute
85. a . far  
b . farther  
c . furthestmost  
d . furthermore