The difficulties historians face in establishing cause-and-effect relations in the history of human societies are broadly similar to the difficulties facing astronomers, climatologists, ecologists, evolutionary biologists, geologists, and palaeontologists. To varying degrees each of these fields is plagued by the impossibility of performing replicated, controlled experimental interventions, the complexity arising from enormous numbers of variables, the resulting uniqueness of each system, the consequent impossibility of formulating universal laws, and the difficulties of predicting emergent properties and future behaviour. Prediction in history, as in other historical sciences, is most feasible on large spatial scales and over long times, when the unique features of millions of small-scale brief events become averaged out. Just as I could predict the sex ratio of the next 1,000 newborns but not the sexes of my own two children, the historian can recognize factors that made2 1 inevitable the broad outcome of the collision between American and Eurasian societies after 13,000 years of separate developments, but not the outcome of the 1960 U.S. presidential election. The details of which candidate said what during a single televised debate in October 1960 Could have given the electoral victory to Nixon instead of to Kennedy, but no details of who said what could have blocked the European conquest of Native Americans. How can students of human history profit from the experience of scientists in other historical sciences? A methodology that has proved useful involves the comparative method and so-called natural experiments. While neither astronomers studying galaxy formation nor human historians can manipulate their systems in controlled laboratory experiments, they both can take advantage of natural experiments, by comparing systems differing in the presence or absence (or in the strong or weak effect) of some putative causative factor. For example, epidemiologists, forbidden to feed large amounts of salt to people experimentally, have still been able to identify effects of high salt intake by comparing groups of humans who already differ greatly in their salt intake, and cultural anthropologists, unable to provide human groups experimentally with varying resource abundances for many centuries, still study long-term effects of resource abundance on human societies by comparing recent Polynesian populations living on islands differing naturally in resource abundance.

The student of human history can draw on many more natural experiments than just comparisons among the five inhabited continents. Comparisons can also utilize large islands that have developed complex societies in a considerable degree of isolation (such as Japan, Madagascar, Native American Hispaniola, New Guinea, Hawaii, and many others), as well as societies on hundreds of smaller islands and regional societies within each of the continents. Natural experiments in any field, whether in ecology or human history, are inherently open to potential methodological criticisms. Those include confounding effects of natural variation in additional variables besides the one of interest, as well as problems in inferring chains of causation from observed correlations between variables. Such methodological problems have been discussed in great detail for some of the historical sciences. In particular, epidemiology, the science of drawing inferences about human diseases by comparing groups of people (often by retrospective historical studies), has for a long time successfully employed formalized procedures for dealing with problems similar to those facing historians of human societies. In short, I acknowledge that it is much more difficult to understand human history than to understand problems in fields of science where history is unimportant and where fewer individual variables operate. Nevertheless, successful methodologies for analyzing historical problems have been worked out in several fields. As a result, the histories of dinosaurs, nebulae, and glaciers are generally acknowledged to belong to fields of science rather than to the humanities.

Question 1

Why do islands with considerable degree of isolation provide valuable insights into human history?

A Isolated islands may evolve differently and this difference is of interest to us.

B Isolated islands increase the number of observations available to historians.

C Isolated islands, differing in their endowments and size may evolve differently and this difference can be attributed to their endowments and size.

D Isolated islands, differing in their endowments and size, provide a good comparison to large islands such as Eurasia, Africa, Americas and Australia.

E Isolated islands, in so far as they are inhabited, arouse curiosity about how human beings evolved there.

Answer: C

Explanation:
Consider the following lines from the passage: "Those include confounding effects of natural variation in additional variables besides the one of interest, as well as problems in inferring chains of causation from observed correlations between variables." This explains the reason why islands with considerable degree of isolation provide valuable insights into human history. Option c) is the correct answer.
Question 2

According to the author, why is prediction difficult in history?

A. Historical explanations are usually broad so that no prediction is possible.
B. Historical outcomes depend upon a large number of factors and hence predictions is difficult for each case.
C. Historical sciences, by their very nature, are not interested in a multitude of minor factors, which might be important in a specific historical outcome.
D. Historians are interested in evolution of human history and hence are only interested in long-term predictions.
E. Historical sciences suffer from the inability to conduct controlled experiments and therefore have explanations based on a few long-term factors.

Answer: E

Explanation:
Refer to the following lines "Prediction in history, as in other historical sciences, is most feasible on large spatial scales and over long times, when the unique features of millions of small-scale brief events become averaged out. Just as I could predict the sex ratio of the next 1,000 newborns but not the sexes of my own two children. the historian can recognize factors that made inevitable the broad outcome of the collision between American and Eurasian societies after 13,000 years of separate developments, but not the outcome of the 1960 U.S. presidential election."

From this we can understand the reason why the author says prediction in history is difficult is because historical sciences suffer from the inability to conduct controlled experiments. Option e) is the correct answer.

Question 3

According to the author, which of the following statements would be true?

A. Students of history are missing significant opportunities by not conducting any natural experiments.
B. Complex societies inhabiting large islands provide great opportunities for natural experiments.
C. Students of history are missing significant opportunities by not studying an adequate variety of natural experiments.
D. A unique problem faced by historians is their inability to establish cause and effect relationships.
E. Cultural anthropologists have overcome the problem of confounding variables through natural experiments.

Answer: C

Explanation:
Refer to the lines "The student of human history can draw on many more natural experiments than just comparisons among the five inhabited continents. Comparisons can also utilize large islands that have developed complex societies in a considerable degree of isolation (such as Japan, Madagascar. Native American Hispaniola, New Guinea, Hawaii, and many others), as well as societies on hundreds of smaller islands and regional societies within each of the continents."

From this, we can understand that the students of history are missing opportunities by not studying a sufficient variety of natural experiments. Option c) is the correct answer.

XAT Previous Papers

Instructions

Language is not a cultural artifact that we learn the way we learn to tell time or how the federal government works. Instead, it is a distinct piece of the biological makeup of our brains. Language is a complex, specialized skill, which develops in the child spontaneously, without conscious effort or formal instruction, is deployed without awareness of its underlying logic, is qualitatively the same in every individual, and is distinct from more general abilities to process information or behave intelligently. For these reasons some cognitive scientists have described language as a psychological faculty, a mental organ, a neural system, and a computational module. But I prefer the admittedly quaint term "instinct". It conveys the idea that people know how to talk in more or less the sense that spiders know how to spin webs. Web-spinning was not invented by some unsung spider genius and does not depend on having
had the right education or on having an aptitude for architecture or the construction trades. Rather, spiders spin spider webs because they have spider brains, which give them the urge to spin and the competence to succeed. Although there are differences between webs and words, I will encourage you to see language in this way, for it helps to make sense of the phenomena we will explore.

Thinking of language as an instinct inverts the popular wisdom, especially as it has been passed down in the canon of the humanities and social sciences. Language is no more a cultural invention than is upright posture. It is not a manifestation of a general capacity to use symbols: a three-year-old, we shall see, is a grammatical genius, but is quite incompetent at the visual arts, religious iconography, traffic signs, and the other staples of the semiotics curriculum. Though language is a magnificent ability unique to Homo sapiens among living species, it does not call for sequestering the study of humans from the domain of biology, for a magnificent ability unique to a particular living species is far from unique in the animal kingdom. Some kinds of bats home in on flying insects using Doppler sonar. Some kinds of migratory birds navigate thousands of miles by calibrating the positions of the constellations against the time of day and year. In nature’s talent show, we are simply a species of primate with our own act, a knack for communicating information about who did what to whom by modulating the sounds we make when we exhale.

Once you begin to look at language not as the ineffable essence of human uniqueness hut as a biological adaptation to communicate information, it is no longer as tempting to see language as an insidious shaper of thought, and, we shall see, it is not. Moreover, seeing language as one of nature’s engineering marvels — an organ with “that perfection of structure and co-adaptation which justly excites our admiration,” in Darwin's words - gives us a new respect for your ordinary Joe and the much-maligned English language (or any language). The complexity of language, from the scientist’s point of view, is part of our biological birthright; it is not something that parents teach their children or something that must be elaborated in school — as Oscar Wilde said, “Education is an admirable thing, but it is well to remember from time to time that nothing that is worth knowing can be taught.” A preschooler’s tacit knowledge of grammar is more sophisticated than the thickest style manual or the most state-of-the-art computer language system, and the same applies to all healthy human beings, even the notorious syntaxfracturing professional athlete and the, you know, like, inarticulate teenage skateboarder. Finally, since language is the product of a wellengineered biological instinct, we shall see that it is not the nutty barrel of monkeys that entertainercolumnists make it out to be.

Question 4

According to the passage, which of the following does not stem from popular wisdom on language?

A. Language is a cultural artifact.
B. Language is a cultural invention.
C. Language is learnt as we grow.
D. Language is unique to Homo sapiens.
E. Language is a psychological faculty.

Answer: E

Explanation:
Refer to the lines “Language is a complex, specialized skill, which develops in the child spontaneously, without conscious effort or formal instruction, is deployed without awareness of its underlying logic, is qualitatively the same in every individual, and is distinct from more general abilities to process information or behave intelligently. For these reasons some cognitive scientists have described language as a psychological faculty, a mental organ, a neural system, and a computational module”

The author says that popular wisdom considers Language to be a cultural artifact or invention or something that is learnt in school or from your parents. However, this is not the case. Throughout the passage, the author makes the case for it being a “psychological faculty” or instinct. Hence, option E does not stem from popular wisdom like the other options. It instead is suggested by cognitive scientists (and the author) as a view contrary to popular wisdom.

Hence option E is correct

Question 5

Which of the following can be used to replace the “spiders know how to spin webs” analogy as used by the author?

A. A kitten learning to jump over a wall
B. Bees collecting nectar
C. A donkey carrying a load
Question 6
According to the passage, which of the following is unique to human beings?

A. Ability to use symbols while communicating with one another.
B. Ability to communicate with each other through voice modulation.
C. Ability to communicate information to other members of the species.
D. Ability to use sound as means of communication.
E. All of the above.

**Answer:** B

**Explanation:**
Refer to the last line of the para 2 “In nature’s talent show, we are simply a species of primate with our own act, a knack for communicating information about who did what to whom by modulating the sounds we make when we exhale.”

Question 7
According to the passage, complexity of language cannot be taught by parents or at school to children because

A. children instinctively know language.
B. children learn the language on their own.
C. language is not amenable to teaching.
D. children know language better than their teachers or parents.
E. children are born with the knowledge of semiotics.

**Answer:** A

**Explanation:**
Refer to the lines of the last para “The complexity of language, from the scientist’s point of view, is part of our biological birthright; it is not something that parents teach their children or something that must be elaborated in school — as Oscar Wilde said, “Education is an admirable thing, but it is well to remember from time to time that nothing that is worth knowing can be taught.”

Question 8
Which of the following best summarizes the passage?

A. Language is unique to Homo sapiens.
B. Language is neither learnt nor taught.
C. Language is not a cultural invention or artifact as it is made out.

**Answer:** B

**Explanation:**
Refer to the last paragraph of the passage.
Language is instinctive ability of human beings.

Language is use of symbols unique to human beings.

Answer: D

Explanation:
Throughout the para, the author talks about the language being the instinctive ability. Moreover refer to the line of 1st para “But I prefer the admittedly quaint term “instinct”. This shows the correct option to be D

A game of strategy, as currently conceived in game theory, is a situation in which two or more “players” make choices among available alternatives (moves). The totality of choices determines the outcomes of the game, and it is assumed that the rank order of preferences for the outcomes is different for different players. Thus the “interests” of the players are generally in conflict. Whether these interests are diametrically opposed or only partially opposed depends on the type of game.

Psychologically, most interesting situations arise when the interests of the players are partly coincident and partly opposed, because then one can postulate not only a conflict among the players but also inner conflicts within the players. Each is torn between a tendency to cooperate, so as to promote the common interests, and a tendency to compete, so as to enhance his own individual interests.

Internal conflicts are always psychologically interesting. What we vaguely call “interesting” psychology is in very great measure the psychology of inner conflict. Inner conflict is also held to be an important component of serious literature as distinguished from less serious genres. The classical tragedy, as well as the serious novel, reveals the inner conflict of central figures. The superficial adventure story, on the other hand, depicts only external conflict; that is, the threats to the person with whom the reader (or viewer) identifies stem in these stories exclusively from external obstacles and from the adversaries who create them. On the most primitive level this sort of external conflict is psychologically empty. In the fisticuffs between the protagonists of good and evil, no psychological problems are involved or, at any rate, none are depicted in juvenile representations of conflict.

The detective story, the “adult” analogue of a juvenile adventure tale, has at times been described as a glorification of intellectualized conflict. However, a great deal of the interest in the plots of these stories is sustained by withholding the unraveling of a solution to a problem. The effort of solving the problem is in itself not a conflict if the adversary (the unknown criminal) remains passive, like Nature, whose secrets the scientist supposedly unravels by deduction. If the adversary actively puts obstacles in the detective’s path toward the solution, there is genuine conflict. But the conflict is psychologically interesting only to the extent that it contains irrational components such as a tactical error on the criminal’s part or the detective’s insight into some psychological quirk of the criminal or something of this sort. Conflict conducted in a perfectly rational manner is psychologically no more interesting than a standard Western. For example, Tic-tac-toe, played perfectly by both players, is completely devoid of psychological interest. Chess may be psychologically interesting but only to the extent that it is played not quite rationally. Played completely rationally, chess would not be different from Tic-tac-toe.

In short, a pure conflict of interest (what is called a zero-sum game) although it offers a wealth of interesting conceptual problems, is not interesting psychologically, except to the extent that its conduct departs from rational norms.

Question 9

According to the passage, internal conflicts are psychologically more interesting than external conflicts because

A internal conflicts, rather than external conflicts, form an important component of serious literature as distinguished from less serious genres.

B only juveniles or very few “adults” actually experience external conflict, while internal conflict is more widely prevalent in society.

C in situations of internal conflict, individuals experience a dilemma in resolving their own preferences for different outcomes.

D there are no threats to the reader (or viewer) in case of external conflicts.

Answer: C

Explanation:
Options A, B and D are never mentioned in any part of the passage. Options C seems to be explaining perfectly why internal conflicts are psychologically more interesting than external conflicts.
Question 10

According to the passage, which of the following options about the application of game theory to a conflict-of-interest situation is true?

A  Assuming that the rank order of preferences for options is different for different players.
B  Accepting that the interests of different players are often in conflict.
C  Not assuming that the interests are in complete disagreement.
D  All of the above.

Answer: D

Explanation:
In the 1st paragraph, the last 3 lines indicate that the options A and B are true.
In the 2nd paragraph, the first 2 lines indicate that the option C is true.

Hence, all the above is the answer.