

The first and most important rule of legitimate or popular government, that is to say, of government whose object is the good of the people, is therefore, as I have observed, to follow in everything the general will. But to follow this will it is
5 necessary to know it, and above all to distinguish it from the particular will, beginning with one's self: this distinction is always very difficult to make, and only the most sublime virtue can afford sufficient illumination for it. As, in order to will, it is necessary to be free, a difficulty no less great than the
10 former arises – that of preserving at once the public liberty and the authority of government. Look into the motives which have induced men, once united by their common needs in a general society, to unite themselves still more intimately by means of civil societies: you will find no other motive than that of
15 assuring the property, life and liberty of each member by the protection of all. But can men be forced to defend the liberty of any one among them, without trespassing on that of others? And how can they provide for the public needs, without alienating the individual property of those who are forced to contribute to
20 them? With whatever sophistry all this may be covered over, it is certain that if any constraint can be laid on my will, I am no longer free, and that I am no longer master of my own property, if any one else can lay a hand on it. This difficulty, which would have seemed insurmountable, has been removed, like the first, by
25 the most sublime of all human institutions, or rather by a divine inspiration, which teaches mankind to imitate here below the unchangeable decrees of the Deity. By what inconceivable art has a means been found of making men free by making them subject; of using in the service of the State the properties, the persons and
30 even the lives of all its members, without constraining and without consulting them; of confining their will by their own admission; of overcoming their refusal by that consent, and forcing them to punish themselves, when they act against their own will? How can it be that all should obey, yet nobody take upon him to command, and that all
35 should serve, and yet have no masters, but be the more free, as, in apparent subjection, each loses no part of his liberty but what might be hurtful to that of another? These wonders are the work of law. It is to law alone that men owe justice and liberty. It is this salutary organ of the will of all which establishes, in civil right, the
40 natural equality between men. It is this celestial voice which dictates to each citizen the precepts of public reason, and teaches him to act according to the rules of his own judgment, and not to behave inconsistently with himself. It is with this voice alone that political rulers should speak when they command; for no sooner does

45 one man, setting aside the law, claim to subject another to his private will, than he departs from the state of civil society, and confronts him face to face in the pure state of nature, in which obedience is prescribed solely by necessity.

1. The paradox in line 28 is resolved according to the author when an individual

- A. submits to the rule of law and thus is at liberty to do anything that does not harm another person
- B. behaves according to the natural rights of man and not according to imposed rules
- C. agrees to follow the rule of law even when it is against his best interests
- D. belongs to a society which guarantees individual liberty at all times
- E. follows the will of the majority

2. The author's attitude to law in this passage is best conveyed as

- A. respect for its inalienable authority
- B. extolling its importance as a human institution
- C. resignation to the need for its imposition on the majority
- D. acceptance of its restrictions
- E. praise for its divine origin

3. The author would agree with all of the following **except**

- A. government must maintain its authority without unduly compromising personal liberty
- B. individual freedom is threatened in the absence of law
- C. justice cannot be ensured in the absence of law
- D. political leaders should use the law as their guide to correct leadership
- E. the law recognizes that all men are capable of recognizing what is in the general interest

The tale of Piltdown Man, the most infamous forgery in the contentious detective story of the origins of mankind, began in 1912. On December 18 that year Charles Dawson, a well-known amateur British archaeologist, and Arthur Smith Woodward, of
5 the British Museum of Natural History, announced the discovery of some amazing human fossils. The remains comprised nine pieces of skull, a broken jaw with two teeth in place, a few stone tools, and some animal bones, all of which had been discovered on a farm near Piltdown Common in Sussex.

10 When pieced together the skull looked distinctly human. Although Piltdown Man, as the hominid became known, had unusually thick bones, the brain case was large and rounded. There was no sign of prominent brow ridges or other apelike features. However, the shape of the jaw bone resembled that of an ape. The only human
15 characteristic of this jaw was the wear on the two molars, which

were ground down flat, as is frequently true of hominids who eat tough or abrasive foods, such as seeds. In other words the creature had the jaw of an ape and the skull of *Homo sapiens*. The primitive stone tools found with these remains suggested a
20 remote age for Piltdown Man, perhaps the Early Pleistocene or even the Late Pliocene. (In 1912 experts thought the Pliocene lasted from 1 million to 600 000 years ago. Scientists now date it to between 5 million and 1.7 million years ago.) This date was also supported by some animal bones found with Piltdown Man.

25 To most scientists of the time, Piltdown Man fulfilled a prediction made by the pioneering evolutionist Charles Darwin, who had believed that humans and the apes could be connected genetically through a still undiscovered creature. Most significantly, it was half-human in precisely the feature
30 that was then accepted as the most important difference between humans and the apes - the brain. At this time there was little fossil evidence to contradict the idea that the brain was among the first of the human features to evolve.

As time went on, however, *Homo erectus* fossils were found in
35 Java and China, while in South Africa the australopithecines were being discovered. All these fossils had human-like jaws and teeth and relatively small brains in contrast to Piltdown Man's large cranium and apelike jaw. The large brain simply did not fit with the rest of the fossil evidence. By 1948
40 scientists knew that bones buried in the earth gradually absorb fluorine. The older a bone, the more fluorine it contains. When the Piltdown materials were tested for fluorine, the skull and jaw fragments turned out to be much younger than the Early Pleistocene animal bones with which the skull
45 had been found.

Scientists were now very suspicious. In 1953 all the Piltdown material was tested for its authenticity. Not only was the recent age of the jaw and skull confirmed, but the jaw proved to be that of a modern orangutan, with the teeth filed down
50 in a quite obvious manner to imitate wear on human teeth. But the forger had not stopped there. A bone tool found with the remains had been made in recent times with a steel knife, which leaves different marks than does a stone flake or axe. The tools, as well as the animal bones, had been
55 taken from different archaeological sites.

Once the forgery was exposed by modern scientific analysis the mystery was no longer where Piltdown Man came in human evolution but who was responsible for the hoax, and why? Although Dawson, the discoverer of most of the Piltdown material, is frequently singled out as the person responsible for this practical joke, there is no definite proof and the question is far from settled.

4. The Piltdown skull seemed distinctly human because it had

(Select ALL answer choices that apply)

- A. a large brain
- B. thick bones
- C. brow ridges

5. The scientists of the time made which of the following mistakes

- A. believed that fossil discoveries would reveal much about human origins
- B. had preconceived ideas about what features an early hominid should have
- C. followed the ideas of Darwin in the face of counterevidence
- D. incorrectly judged the size of the brain
- E. failed to examine other fossil evidence available at the time

6. The animal bones found buried with the Piltdown Man were all of the following **except**

- A. shown to be genuinely Pleistocene
- B. more recent than first thought
- C. unconnected with the human remains
- D. deliberately planted at the site
- E. not originally from the Piltdown site

7. It can be inferred that it took so long to expose the forgery because

- A. the forger was exceptionally clever making it difficult to detect the alterations
- B. reliable techniques for dating rocks did not exist until recently
- C. the bones were not subjected to close scrutiny until considerable contradictory evidence accumulated
- D. the scientists had no reason to doubt the credibility of the team who made the discovery
- E. similar fossils from other archeological sites had proved to be genuine

8. Answer this question based on the information in the paragraph below.

Most scientists agree that new lines of interdisciplinary research are the need of the hour. Even government committees on science have stressed the need for more interdisciplinary projects. Yet, **of ten proposals for new interdisciplinary projects last year, only one was successfully funded.** Some

have suggested that this means that as yet researchers are not coming up with sufficiently persuasive projects, or that their proposals are not of high enough quality, or even that the reputations of these researchers is not high enough. However, the real reason probably lies in the way funding is organized. **Funding is still allocated according to the old categories and there are no funds specifically for research that overlaps different subject areas.**

The two parts in bold-face are related to each other in which of the following ways?

- A. The first is a finding that the author finds unacceptable; the second is the author's own position
- B. The first is a finding that the author attempts to account for; the second is a finding that contradicts the author's main conclusion.
- C. The first is a fact that the author attempts to account for. The second is data that explicitly supports the author's main conclusion.
- D. The first is a position that the author opposes; the second is the author's main position.
- E. The first is a situation that the author finds paradoxical; the second is an assumption that the author uses to reinforce the paradox.

Answer Key

1. A
2. B
3. E
4. A
5. B
6. B
7. C
8. C