They can move quickly from environments in which man has lived for countless centuries into environments in which man has never lived before. Man can make his environment what he will.

Our early ancestor gradually moved from caves to rude huts to cold houses of rough hewn stone. For countless centuries he warmed himself before open fires. The building industry has not been the most notable example of the application of science in the satisfaction of human desires, but within a century man has learned to build for himself towering structures in which he is surrounded by the humidity and temperature and light he chooses.

Throughout recorded history and until a century ago, men moved on their own legs. They gradually learned to travel a little faster and more easily by harnessing animals to carts on skids or wheels; boats were ultimately propelled by the force of wind on sails. In the short space of a century and a half, man has increased his speed of travel from no more than he could run to greater than the velocity of sound.

The leap of the imagination from the fall of an apple in the garden at Woolsthorpe to an architectonic concept, cosmic in its scope and grandeur, is one of the dramatic moments in the history of human thought.

There are times when the boundaries of human experience, always narrow, and fluctuating but little between age and age, suddenly widen themselves, and the spirit of man leaps forward to possess and explore its new domain. Those are the great ages of the world: The age of Pericles in Athens; the age when Europe passed, spiritually and artistically, from what we call the dark to what we call the Middle Ages; the Renaissance; the period of the French Revolution. The present period in which man is now possessed of new forces, new extensions of his senses, new mental powers with which to seek knowledge and shape the pattern and environment of his life could be another of the great ages of the world—or the catastrophic last.

In your chosen career you will acquire great power that knowledge of nature gives. But with power should go humility, humility in the awareness of our heritage of hard-won knowledge. Recall, I suggest, the desirable and widely admired modesty of Col. Glenn who recognized that what he did was made possible by many others. We who know the narrow limits of man's knowledge know that man's authority is a frail thing in the face of natural forces.

• Science News Letter, 81:170 March 17, 1962

GENERAL SCIENCE

Young Scientists Divided On Atmospheric Tests

➤ THE NATION'S top young scientists, winners of the National Science Talent Search assembled in Washington, were about evenly divided as to whether scientists should favor atomic testing in the atmosphere.

In a poll taken by SCIENCE SERVICE of the 40 young winners from all parts of the country, 20 opposed the step, 19 favored atmosphere testing with eight of these agreeing only if military necessity demands. One young scientist felt that scientists should not take a specific attitude toward nuclear testing.

Typical comments, in opposition, were:

All atomic testing in the atmosphere should be stopped until more is known about its effects on man.—Lewis Haberly, 17, Severance, N. Y.

The testing and buildup of weapons will never bring about peace, but can only prepare us for war.—Robert E. Strom, 15, New York City.

I do not think we can afford to stop atomic testing, but I do think we can afford to stop doing so in the atmosphere.—Jack Morava, 17, Mercedes, Texas.

In favor of atmospheric testing:

Our national security rests on our supremacy in the field of nuclear weapons.—Donna Gene Hayes, 18, Toledo, Ohio.

Atomic tests have not been shown to be significantly more dangerous than the other common health hazards, particularly war.—Robert L. Walton, 17, Cincinnati, Ohio.

Scientists should favor atomic testing in the atmosphere only if such testing is absolutely necessary in maintaining the security of the Nation and the free world.—Mitchell J. Fruitstone, 17, Coral Gables, Fla.

Not voting was Raphael W. Zahler, 16, Little Neck, N. Y., who said:

"Saying that scientists should take a specific attitude toward nuclear testing and building fallout shelters is just like saying that people five feet eight inches tall should take a specific attitude toward these issues. My feeling is that scientists as a group will act together only on issues having to do with science. On political questions, scientists are just other human beings.

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GENERAL SCIENCE

Forty Winners Visit President at White House

See Front Cover

➤ "WE EXPECT great things of you," President Kennedy told the Science Talent Search winners when they visited him at the White House.

This country feels the necessity of developing "people competent in science and technology," the President said. He told the winners that he hoped that the success of the Science Talent Search winners "would encourage others to follow in their paths."

He told the young scientists that he had looked at the examination that they took to compete in the Science Talent Search and, with a broad smile, added: "I don't know anyone in Washington who could pass, particularly in the White House."

The President predicted that our life is going to be changed with the space age.

After greeting the winners, President Kennedy arranged for them a special tour through the redecorated reception rooms of the White House.

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