Heredity, Environment and Hoover

Heredity and Hoover By Leon F. Whitney

Dr. Whitney is Secretary of the American Eugenics Society.

Look at a picture of Herbert Hoover and compare it with that of his mother and you see where the President got a large share of his looks. The inheritance of physical traits is easy to understand.

In fact, no one doubts the powers of heredity so far as physical traits are concerned.

We look at a fine corn plant and know it is fine because of a long-time selection which produced it. We know the 300-egg-per-year hens differ from the common barnyard variety almost wholly because of their heredity. We look at our own pictures and decide that we got our looks not by accident, but by heredity.

It is when we enter the realm of the mental traits that confusion begins. But the brain is a physical organ, and the brain governs our thoughts and actions. We respond to stimuli from outside.

The idiot, imbecile, or the moron grades of intelligence can certainly not be expected to achieve any intellectual fame. The constitutional force simply is not there. Twenty-five per cent. of our people have inferior and very inferior intelligence. Only twenty-lve per cent. have superior and very superior. Only the top four per cent. have very superior intelligence.

No psychologist doubts that Herbert Hoover comes within this top four per cent. Where did he get his intelligence? From the air he breathed? From the water he drank? From his mother's tender care? Oh, no. That degree of intelligence was fixed when he was a single cell. He has never been able to alter it, but his broad experience has made him wise.

Herbert Hoover's success is a matter of mental, not physical traits, although his good health has been a great asset. That is why there is no room for any dispute as to which was more important in shaping the present product.

Our first conclusion therefore is that his heredity is of great importance to him because it saw to it that he was one of the top four per cent. of our people. Environment had nothing to do with that.

Jesse Hoover, Herbert's father,



THE PRESIDENT'S VOICE PHOTOGRAPHED. This picture of Mr. Hoover as he delivered his inauguaral address was enlarged from a single frame of motion picture film in the Pathé Sound News reel of the event. The jagged line along the left is the sound record, recorded by RCA Photophone, which is converted into a replica of the speech when it passed over a photoelectric cell in the projector. (Photo by courtesy Pathé News.)

died of typhoid fever when he was 33. Herbert was then six. Huldah, Herbert's mother, died when he was nine. Assume that little Herbert, an orphan, had no "folks" to look after him and that we are considering this child with the idea of adopting him.

Remember that a person is not the product of his mother or father, but rather of the whole stock from which they and he came. First, consider the general stock of which his specific stock was a part. Was it the sort of stock that produces one eminent man in many thousands or one in seven?

Let's take a look at the stock. Quaker. What are Quakers? They are a very highly selected stock—judged on a mental basis. They have strong convictions. No easy life for them—no ungodliness, rather isolation and the contempt of certain others.

It takes character and idealism to make such decisions and to live up to them. It takes self-control, will power, persistence.

Herbert Hoover came of excellent general stock. But what of his ancestors? They, too, may help us decide whether or not to adopt this boy.

Hoover's ancestors were mostly of

colonial stock. Many of them were land owners. Quite a large number were pioneers living on the frontiers, spreading out, seeking new lands to subdue and live on and keeping always to the Quaker faith. They founded West Branch, Iowa, where Herbert was born and, it is said, broke ground for the meeting house before they began to clear the land.

A study of Hoover's ancestors reveals men and women of glorious character. It was the custom to farm—most frontiersmen were farmers, but a great amount of mechanical ability is found on Herbert's father's side of the family. All through the line there was a high regard for intellectual things.

This shows what heredity was doing. Farming had to be the industry in those early days, but farming did not offer enough for an active mind. Thus—"His grandfather on the Minthorne side is remembered as a bookish farmer who carried his favorite volumes in his saddle bags."

More than that, there are no records of defectives in the Hoover stock.

Indeed, from his general stock and from his specific stock Hoover promises well. (Turn to next page)

Heredity, Environment and Hoover—Continued

Look at his parents, because he is more closely related to them than to his grandparents or others.

His father had stepped into commerce, having broken away from farming. He had a blacksmith shop and machine agency. He was becoming a real success at it when, at the age of 33, he died. Some who knew both the elder Hoover and the President, see some of his father's qualities in the son—especially his mechanical ability.

Herbert's mother, Huldah, was a woman of great native ability. Not only did she support the family for four years until she died, but she became a much sought after "speaker" at the Quaker meetings. This, indeed, was exceptional. Much of the family's living came from her sewing, which she did artistically and rapidly.

One thing is obvious—none of Herbert Hoover's ancestors rose to great eminence. But that does not indicate that latent genius was not present. Latent and revealed genius are not the same. The seed from which Hoover came was rich with latent genius; the soil in which the seed was sown had not all of the elements necessary to bring that seed to fullest fruition.

Herbert Hoover is one of those rare gems come to light where his ability may be appreciated.

On several occasions after I have spoken, someone in the audience has propounded the oft-asked question, "You say the large family has so much in its favor; what do you think about having one or two children and giving them more advantages?" To which I always reply: "Are you sure what constitutes genuine advantages?"

My own idea of real advantage is different. I suggest this formula in child training if you want to bring out the best that is in a lad: give the child all the adversity he can stand and still not break his spirit!

Herbert Hoover fought adversity the greater part of his early life. The advantages of this sort of education were real and allowed his potential capacity to come to full fruition. Thousands of boys have been forced to serve even harder apprenticeships, but the lack of their heredity prevented their achieving any great success.

The boy who climbs from obscurity to deserved fame has more than opportunity to help him. He has a constitutional force which grew from a good heredity which was planted where it could develop.

Hoover's Environment

By MANDEL SHERMAN

 $\mbox{Dr.}$ Sherman is Director of the Washington Child Research Center.

When any man is brought to the attention of the nation and his achievements are suddenly realized, everyone becomes interested in the reasons for his rise to fame. Many people would ascribe his accomplishments to inherent endowment, a natural result of hereditary influences.

Thus it is with President Hoover, a man who has done exceedingly good work and has a record of many accomplishments. The absence of any startling or unusual incidents in his past life makes it appear easy to account for his remarkable success in terms of hereditary influences.

People often think of heredity as some mysterious force which shapes a man's destiny regardless of his experiences in early life. The cause for such assumptions is evident—the final man and his immediate past accomplishments are before us, but we know very little, nor do we care in most cases, about the forces in his early life which helped to shape him.

Psychologists know that the average person often thinks of any event in terms of the cause just preceding it. He forgets that the last cause is but one of many and that the final happening is the result of their cumulative effect.

Looking into the incidents of President Hoover's early life we find many conditions which ordinarily would go unnoticed but which, by their cumulative effect, no doubt had a profound influence in shaping his career and personality.

He worked even as a child, and when but a youth had to be largely self-supporting. He early began to develop independence of thought and purpose which served him so well later on in life.

His earliest experiences were full of hardships. The modest means of his parents required a thriftiness which is exemplified throughout most of his life. Almost everyone around him was thrifty and practical and fostered these traits.

The orthodox religious attitude of his parents and the early death of the father, which narrowed the mother's interests to sewing and religious work, helped to develop in Hoover "introverted" characteristics, that is, shyness, antipathy toward public appearance, dislike of superficial friends and an attitude of looking into every situation closely with the viewpoint of examining it in its relation to his future welfare.

In his early life, as also later on at Stanford University, Hoover became interested in results rather than in individual incidents. A person with opposite personality traits often is interested as much in the minor incidents of any situation as in the final result, but Hoover always looked toward the final accomplishment. This made it necessary for him to concentrate on particular problems.

The restraint fostered by his early religious training further gave him a tenacity of purpose and the ability to steadily pursue a line of work without dissipation of interests. His original endowment of physical strength and intelligence made it possible to accomplish many tasks which would otherwise have been impossible.

Although it is generally believed that intellectual capacity is hereditary, recent experiments have shown that environment does play a role. Wide differences in intelligence are due to heredity, but a normal child does benefit by good environment.

Imbecility and idiocy are inheritable defects, and such defectives never develop normally. However, the intellectual growth of a normal child may be speeded up by good environmental conditions.

When Hoover went to Stanford his experiences there also were conducive to the development of an "introverted", strong-minded person with set purposes and with the ability to concentrate and to work hard for a long time in order to accomplish any pre-determined task.

It is known that he did tackle many tasks during his college career and that he was usually successful.

His very modest means and lack of social prestige set him outside the pale of the fraternities, the members of which usually were financially independent and had a so-called good social background.

Furthermore, he had to work outside of class hours and would have been unable to participate in social affairs even had he been accepted in their circles.

This was a further stimulus to his intense desire to accomplish something worth while and to become independent of any situations set down by customs and traditions. (Turn to page 247)

Revolving Hangar Studied

Two projects for housing Europe's aircraft are being studied by the American Air Transport Association, Chicago. One is a revolving hangar for lighter than air craft, which the German government is constructing at a cost of \$5,000,000. Building the hangar floor on a swivel will enable the huge zeppelins to take off without regard to the direction in which the wind is blowing which in turn will raise the safety factor in take-offs considerably.

The other is the two-story hangar built by Mussolini at the airdrome in Rome. Planes taxi up a 200-foot runway to the upper story, the lower being reserved for smaller planes, pilots' and passengers' quarters. Airports in this country in many instances are becoming so crowded that hangar space is either at a premium or unobtainable.

Science News-Letter, April 20, 1929

Heredity, Environment and Hoover—Continued

His situation required some accomplishment which would compensate for his lack of financial and social prestige. Furthermore, the snobbish fraternity students developed a situation which required that they be shown that their methods of "running" the school were not infallible and that others should take command.

The organization of an opposition to these fraternities gave him the chance to defeat the fraternity students, who set themselves up as more important than he.

The intensity of his efforts, the concentration upon his task and the long hours and hard work necessary to perfect the opposition is but another illustration of the way in which Hoover sets his purpose and works constantly toward the final result.

The restriction of his interests with the consequent turning of all his efforts in one direction is noticeable throughout his life. He had no time for the various interests which the present-day youth has. At no time did he show an intense interest in art or in literature. Every particle of energy could thus be turned into one purpose.

Chance made it possible for him to learn much that makes him so admirably fitted for the presidency. His mission to Australia and to China as a mining engineer allowed him to come in contact with many people, taught him tact and diplo-

Indian Carvings Found

Archæology

Pictures that were carved into the rocks long ago by Indians have been discovered in British Columbia, Harlan I. Smith, Canadian Government archaeologist has reported. Mr. Smith came upon the rock pictures twenty miles west of Victoria at a point overlooking the Pacific Ocean. It is considered remarkable that these carvings have escaped the notice of archaeologists who worked in the region for many years.

Mr. Smith has spent the field season collecting Indian specimens in western Canada, making motion picture records in the Indian areas, and photographing the crude old paintings and carvings placed on the rocks by Indian artists.

Science News-Letter, April 20, 1929

The United States has 22,000,000 dairy cattle, an equivalent of one cow to about five persons.

macy and made him familiar with various governments.

The necessity of being highly economical and of getting out of financial "jams" taught him at an early age to understand organization, and so it was during the Boxer rebellion in China that he was found to be the best person to organize the early defense of one of the foreign settlements and the distribution of food.

He who had been required to exercise the most careful economy during his early life knew well that careful organization with attention to the minutest details was necessary for the successful result in any economic crisis.

He learned, too, during his early childhood and in his youth that accomplishments are not sudden, but come about only through long and hard work, and he has followed this method throughout his life.

President Hoover's personality and abilities are thus seen to be largely the result of learning and training during his early life and youth.

His ability to concentrate, his hard work, his giving of himself to details of organization and his diplomacy and tact, now so apparent to all, are but the cumulative result of his many experiences and learning throughout his life.

Science News-Letter, April 20, 1929

NATURE RAMBLINGS By Frank Thone

Natural History



Bird Waves

Today the woods round about may be full of birds. A few days later the air no longer rings with their incessant shouts of optimism and the injudicious early worm is safe again. The woods are practically empty of birds; there are only a few scattering stragglers.

Then comes a lull in bird travels. Another week, however, and things are lively once more; to be followed, perhaps, by another calm and another influx. Not only robins, but all kinds of migrating song birds apparently go through the same kind of cycle.

There is a theory that has gained acceptance with many ornithologists that these changes do not represent mere chance fluctuations in the bird population of any given place, not even responses to climatic variations, but that migrating birds travel in regular, more or less even-fronted hordes or waves, just like successive lines of troops going over the too. The idea is that each successive wave represents a bird population that has wintered in a different latitude from the one that has just preceded it. Thus, birds that have wintered in Virginia, Kentucky and Missouri will travel in one wave, or set of waves; birds that have wintered in northern Alabama, Mississippi and Texas will travel in another, and birds that have patronized Gulf resorts during the cold season will travel in still another. There is a considerable dispute as to whether these successive waves keep their relative order during the summer, or whether they reverse. That is, the question is whether the birds that winter farthest north go up into Canada, or whether they make only a short flight, and the birds from farther south jump clear over their territory and choose extreme territory for summer range as well as for winter.

Science News-Letter, April 20, 1929