

ARCHAEOLOGY

# America's First Slums

## Ancient Indians in the Picturesque Pueblos of the Southwest Suffered From Crowding and Unsanitary Homes

By DR. FRANK THONE

See Front Cover

**S**LUMS, and the manifold evils that they breed, are no new thing under America's sun. Slum-like conditions obtained among the Pueblo Indians of the Southwest when white men first saw them—had existed, indeed, for nearly half a thousand years before the first exploring parties of Spaniards penetrated into what is now the state of Arizona.

And these same ancient-American slum ways of living have been in large measure responsible for the decline of the Pueblo population, once ten times more numerous than it is today in the uplands of northern Arizona. So at least declares Dr. Harold S. Colton, director of the Museum of Northern Arizona, at Flagstaff.

Slum life killed off the Pueblos in exactly the same way it kills off the wretched poor who house miserably in the East Sides of the white man's cities, Dr. Colton charges. Crowded indecently together, ignorant of the elements of sanitation, lacking the means to practice it even if they had the knowledge, the people swallow disease-polluted water. And so they die—especially the children.

### A Major Cause

Of course, Dr. Colton does not mean to imply that unsanitary living conditions were the only thing that brought the Pueblos to their present low estate. In anything so complex as the course of a human civilization, there are always numerous factors at work. One of the idlest occupations of the amateur historian is the search for "the" cause of the Fall of Rome. Similarly, it were idle to speak of "the" cause of Pueblo decline. Nevertheless, among the things that brought about the decline, crowded living and the diseases of poor sanitation must be reckoned as well toward the top, the Arizona archaeologist believes.

Pueblo architecture has always had a strangely glamorous attraction for white men. In the very earliest days of Spanish settlement in Mexico, wonder-tales of the shining Seven Cities of Cibola,

built all of silver, lured Coronado and his hardy band into their magnificent but disappointing quest, that carried them as far as Kansas before they owned their defeat and went home. They saw and marvelled at these piled-up cities of the Indians, unlike any other native architecture and far advanced beyond the unpretentious dwellings of neighboring tribes. But they weren't built of silver, and their inhabitants had no gold, so the Spaniards passed them up and pushed on after their Midas-mirage, that mocked them over horizon after horizon.

Later comers, Spanish and Saxon alike, have felt the fascination of these strange houses, and have become romantic about them. They have come to dominate much of Southwestern architecture, from artist's studio at Taos to humble hot-dog stand by the highway. Recent Americans have taken a curious pride in pointing to their piled-up rooms on rooms as this country's first apartment houses.

### Nothing to be Proud Of

As if apartment houses were something to be proud of at all! Even at best, our city apartment buildings are a concession to necessity, and are made tolerable only by all the expensive modern improvements that can be built into them: elevator service, plumbing, electric lighting, good ventilation and ample windows. If they lack these things, they are not dignified with the name of apartment houses but are called tenements, and slum clearance agencies size them up speculatively and reach for an ax.

But the Indian pueblo, stripped of all its romance, has even fewer conveniences than a city tenement. It is a "walk-up" of the most primitive type, with ladders instead of stairs. It is as innocent of plumbing as it is of windows. Water has to be brought in from a distance in earthenware jars, and household wastes of all kinds are simply thrown out on the ground nearby. If it didn't stand in a desert, where sun and wind quickly render such slops as nearly innocuous as possible, the place would be simply intolerable.

This is not in any way an indictment of the people who built it and have

lived in it for centuries. They have worked within the limits of their primitive knowledge, and within those limits have done a really remarkable job. Probably white men, planted in a similar environment, with no more materials and no better tools, could not have evolved even as good an answer to the challenge of their surroundings. Nevertheless, disease germs are no respecters of ingenuity or effort, unless these are unremittingly applied to the task of disease prevention. This gap in the Indian's knowledge is a weak place in his life-armor. And he has paid the price.

### Rains Add Hazard

If the Pueblo Indians only dwelt in a total desert, rainless the year round, their unsanitary way of throwing out household wastes would not constitute a particularly bad health menace. Quickly dried by strong sun and wind, the garbage and household litter lock up the germs and hold them fast. Germs must have a watery medium to live in, if they are to develop their evil powers.

But Pueblo-land is visited by more or less regular rainy seasons. Water accumulates in puddles around the houses—what its bacterial count must be does not require much imagination to picture. And as if to make the operation of the death-trap doubly sure, the Indians attach a ceremonial value to water that has thus been given directly from on high. Mothers give it to their children, and indignantly reject suggestions by meddling white men that it may not be very good for the little ones.

In 1934, says Dr. Colton, almost all the children in two large pueblos in northern Arizona died. The agent of the Indian Bureau blamed it on too much watermelon!

The population of Pueblo-land was not always kept at its present low level by such suicidal community self-poisoning. Dr. Colton has worked out an estimate, on the basis of archaeological evidence, that about the year 1000 A.D. there were some 23,000 Indians living in northern Arizona, in place of the present 2,800. That is a really large number of mouths for so arid a land to feed, yet they seemed to be well supported by their irrigated patches of corn, pumpkins, beans, and peppers. Even more remarkable is the fact that they had built up this large population



### HOLY

*The puddle in the middle of this Pueblo street is holy water to the Indians although filth makes it deadly to drink. This photograph was taken by the National Geographic Society's Pueblo Bonito Expedition.*

from a beginning of perhaps 3,000 persons in 600 A.D.

But after this high peak in their fortunes, the Pueblo population began to decline. By 1400 A.D. there were only 7,400 of them, and in 1890 the lowest point was reached, with a remnant of 2,000 souls. Since then they have held their own, and increased very slowly against the handicaps that beset them.

Why should the very peak of their good fortune mark the beginning of their decline?

### Changed Their Ways

Dr. Colton thinks that a sudden revolution in their way of living had a good deal to do with it. It was just after they reached their point of greatest numbers that these tribes gave up their old, scattered, one-family dwellings and began to crowd into the swarming, tenement-like pueblo type of houses, with their deadly lack of sanitation.

The earliest ancestors of the Pueblo Indians lived in houses radically different from those their descendants now occupy. They were more or less nomadic hunters, and like all hunting populations their total number was relatively small and probably fluctuated a good deal, in response to abundances and scarcities in game. Their houses were of the type known as pit dwellings, a kind of habitation still used very widely by Indians throughout the West, from the earth lodges of the Mandan in the Dakotas to the "hogans" of the Navajo who are nextdoor neighbors to the Pueblo tribes.

At some still unknown date before 600 A.D. agriculture was introduced and the Pueblo people soon began to

increase in number, as always happens when a dependable cultivated food supply replaces an undependable one obtained by hunting. But the people still continued to live in their pit dwellings for another 400 years, while their numbers increased to the 23,000 mark.

Then some one invented or imported the new type of house, the pueblo—and shortly the fatal decline began.

Why should the Indians have remained healthy so long as they lived in the pit dwellings, only to get into serious trouble as soon as they moved into what looked like much better quarters?

Why, for that matter, do the pit-dwelling Navajo thrive and increase today, while their "apartment"-dwelling neighbors barely manage to hold their own?

### The Hogan Better

The answer is plain, Dr. Colton thinks: for life under primitive conditions, a pit-dwelling, such as a Navajo hogan, is really better than the more pretentious-looking pueblo type of house.

The Navajo isn't a bit neater in his ways than the Pueblo; he throws his slops out in front of his house, too, and lets the mess lie right there. But the hogans are scattered, one-family dwellings; there isn't any crowding, and the garbage concentration is consequently much lower. Water is always brought from a distance, so that there is little chance of pollution. Being roughly built, the hogan has an effective automatic ventilating system.

Moreover, the Navajo gets away from his messy accumulations rather fre-

quently. He is a shepherd by principal occupation, and so must keep moving along with his flocks. So old hogans are abandoned and new ones built, possibly many times in one man's lifetime. Contrast that with the generations of persistent life in the pueblos—with Great-grandma's garbage still lying in front of the door.

Another thing makes for occasional change of living quarters among the Navajo. It is a part of their fixed tribal custom that if a person dies in a hogan, that hogan must be torn down. The Navajo do try to carry dying members of their families outdoors, if they are not in the mood for moving at the moment; but sometimes a relative will play them the ill trick of dying in the house, thereby automatically evicting the rest of the family and necessitating the building of a new hogan on clean ground.

### In Modern Times

On a somewhat more sophisticated scale, we Caucasians have been repeating the story of the Pueblo. To be sure, the traditional farm boy who leaves the old home isn't migrating from a hogan—though some of them, at that, did come from prairie dug-outs or sod-houses, which were pit-dwellings learned directly from the Indians. If he makes good in the big city, he is privileged to live in a very superior pueblo, with clean water piped in, and sewage piped out, and regular removal of garbage, and nightly janitor service, and all that kind of thing. His dooryard stays clean and he lives.

But if he doesn't do so well, or if a depression hits him, and he has to house himself and his family on the wrong side of the tracks—

"Nearly a fifth of our urban population live in dilapidated houses, generally crowded, and typically lacking private indoor toilets and bathtubs. Nearly half of these substandard homes are also without electric lights and about a quarter of them have no running water," is the grim summary of a recent Government report.

Indians living under conditions more or less analogous to these suffered a 90 per cent population loss in about 25 generations.

The illustration on the cover of this week's SCIENCE NEWS LETTER shows a cliff dwelling at Mesa Verde.

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Teeth erupt earlier in girls than in boys.