

SOCIOLOGY

# Unlimited Births Among Poor Creating Problem For Future

Surveying Revealing Facts of New Study, Dr. Pearl  
Sees Poverty and Unemployment For Coming Generations



**WHISTLING GODDESS**

*She was never wrong; at least, that is what the Africans thought.*

ARCHAEOLOGY

## Goddess of Fertility Now Rests in Museum Case

**F**ROM the Belgian Congo, the powerful African goddess pictured here has journeyed to an exhibit case in the University of Pennsylvania Museum.

Odima, "the Black One," is made of wood, but wears a high polish from many offerings of palm oil applied by devoted attendants "to refresh the spirit."

In the heart of Africa, Odima was a goddess of fertility. A native woman wishing for a child would consult the medicine man who was the custodian of the goddess. After a conference with Odima, replies apparently issued from the goddess' pursed lips, in a series of whistling sounds. The medicine man interpreted the oracle, telling the anxious woman what Odima said and advised. If the outcome of the situation was unsatisfactory, then, obviously, the woman was unfaithful. The whistling goddess was never wrong.

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**T**HE NATIONAL policy of prohibiting the free dissemination of accurate scientific information about birth control methods is adding definitely and measurably to the difficulty of the problem of poverty and unemployment with which our children and grandchildren will have to deal.

Dr. Raymond Pearl, biology professor in the Johns Hopkins University School of Hygiene and Public Health, has come to this conclusion as a result of an extensive investigation on birth control practices among American women and their effect upon the birth rate and other population problems. Conducted under Dr. Pearl's direction with financial aid from the Milbank Memorial Fund, a progress report has just been made by Dr. Pearl.

Among the nearly 5,000 women interviewed, it was found that birth control had been attempted regularly or intermittently by 45 per cent. of the white women and 26 per cent. of the Negroes, taken as whole groups. But among the well-to-do and rich white women over 78 per cent. had practiced birth control, while only 33 per cent. of the very poor white women had practiced it.

### No Formal Instruction

Almost none of the women, white or colored, had ever had any formal, accurate or scientific instruction in birth control. Many expressed a keen desire for such instruction but did not know where to get it or were hampered in attaining that end by legal and religious restrictions. Slightly over half, 51 per cent., of the white women in moderate economic circumstances practiced birth control.

Birth control was less extensively practiced among newly-weds than among those of longer experience of married life. But among the well-to-do and rich white women recently married 76 per cent. were using birth control, while among the corresponding group of very poor only 19 per cent. used it.

The 4,945 married women included in

the investigation lived in 13 different states and 85 per cent. were whites and 15 per cent. Negroes. They were all residents of large cities, and were a fair sample of urban dwellers as regards religion, occupation, wealth and education. Fifty-nine per cent. of the whites and 66 per cent. of the Negroes had never received more than elementary schooling. Thirty-two per cent. of the whites and 27 per cent. of the Negroes attended high school, while only 6 per cent. of the whites and 3 per cent. of the Negroes went to college or university. The white women studied had been married 5.7 years, and the Negro women 6.4 years, on the average.

### Babies When Wanted

By the intelligent use of birth-control methods 48 per cent. of the well-to-do and rich white women had produced only planned and wanted babies, exactly when they wished to have them. But among the very poor whites this percentage fell to 13, and for the very poor Negro women to 2 per cent.

"The investigation indicates that the innate natural fertility of married couples is probably substantially similar in all economic classes, and in the white and colored races," Dr. Pearl declares. "The apparent differential fertility observed between social and economic classes, and between the races, appears on the basis of the more refined and accurate computations of this investigation to be due almost wholly to those artificial alterations of natural innate biological fertility which are collectively called birth control, at least in the sample of American women so far studied."

### Rich and Poor

By the intelligent practice of birth control among the well-to-do and rich whites the average birth rate was lowered some 73 per cent. below its natural level under present day conditions of life. But among the very poor and poor classes of whites, who numerically make up no small proportion of the whole population, all the really intelli-

gent birth control practiced succeeded in lowering the average birth rate below the natural biological level by only 57 per cent. The investigators reported that only a few more than one-tenth of the women in these unfortunate classes in this sample of material practiced birth control really intelligently.

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#### PALEONTOLOGY

### Glands May Have Caused Evolution of Freak Dinosaurs

**D**INOSAURS may have evolved some of their most bizarre species as the result of a peculiar glandular disease known as acromegaly. Acromegalic human beings become "horse-faced" giants, with huge hands and feet. The disease is caused by the over-activity of the pituitary, a small gland within the skull.

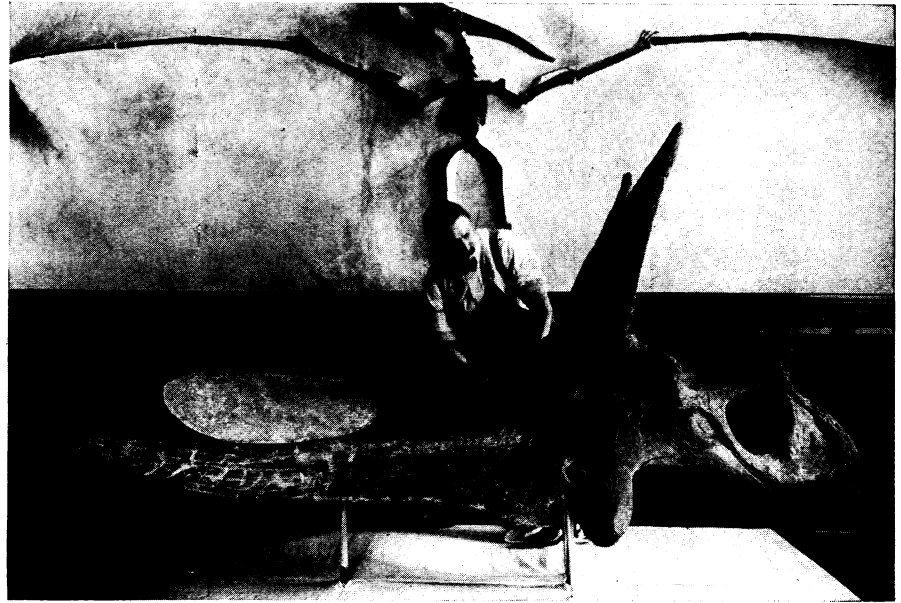
Acromegaly has been invoked by Dr. Richard S. Lull, paleontologist of Yale University, to account for the terrific skull sizes and the outrageous development of horns by certain species of ceratopsians, or horned dinosaurs, whose remains have been found in the Belly River valley, in western Canada. What may have turned a disease into a driving force in evolution is uncertain: Dr. Lull conjectures some abnormality in the food available to the animals.

One of the ceratopsians, the three-horned, rhinoceros-like *Triceratops*, is fairly familiar to the public, through skeletons and restorations in many museums, and especially through "living" models shown at the Century of Progress exposition last summer and in such motion picture romances as "The Lost World." But there were others of even weirder aspect than *Triceratops*; one of them, known as *Styracosaurus*, not only had a long nose horn, but developed eight still longer horns at the edge of his enormous bony frill or mantle that reached backwards from his head to cover his shoulders.

Although these horned dinosaurs were formidable fighters they were not flesh-eaters. This is indicated by their flat, grinding tooth-surface. Their teeth were renewable, apparently indefinitely, so that their life-span was not limited by dental failure as it is in most mammals, Dr. Lull states.

The apparent acromegalic development of the Belly River dinosaurs was not confined to the horned species, but included, for a time at least, all the great reptiles that lived in that limited area.

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#### A GIANT EVEN AMONG GIANTS

*This skull, one of the largest pieces of dinosaurian headwork known, is in the Peabody Museum of Yale University. The great extension back of the huge horns is the bony collar or frill that covered the great beast's thick neck and shoulders. On the wall is the skeleton of a contemporary flying reptile.*

#### ASTRONOMY

## Planetary Merry-Go-Round Will Explain Earth's Motion

**A** MERRY-GO-ROUND will be an important feature of the new Hayden Planetarium which will open in New York next year in connection with the American Museum of Natural History. But this merry-go-round will not be in competition with those at Coney Island, nor will its passengers ride on painted lions and horses.

#### Follow Earth's Course

The visitor will be carried in a small carriage in a circle, representing the orbit of the earth, around the sun, an illuminated globe at the center. Above him the earth itself and other planets, in model form, will move around on tracks, and he will be able to see their changing aspects. He will see how, at different times of year, the sun is viewed against a different background of stars, themselves represented by electric lights on the circular wall of the room, 75 feet in diameter. Thus he may be able to form some appreciation of what travelers in rocket ships of the future will see when they leave our solar system and look back upon it from a point a billion miles or so from its plane.

This device, known as a Copernican Planetarium, will supplement the Zeiss optical planetarium on the floor above, in which the starry skies, as they appear from any part of the earth at any time, will be reproduced by the projection of spots of light upon a hemispherical dome. The Copernican planetarium is named after the Polish astronomer who in 1543 called attention anew to the old theory that the earth revolves around the sun. Since then it has been universally recognized by astronomers as a true statement of the facts. Only one other such device is now in existence, at the Deutsches Museum, in Munich, Germany.

#### Twenty Planetaria

It was at this museum also that the first optical planetarium was erected in 1924. Since then 20 have been erected, including two in the United States, in Chicago, and in Philadelphia. The third is nearing completion in Los Angeles, and the optical planetarium in the Hayden Planetarium will be the fourth in America.

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