

ARCHAEOLOGY

Egyptians Clung to Gods

How middle class Egyptians really lived, and how they clung privately to the old picturesque family gods when one pharaoh insisted that the nation worship one god only, is shown by excavations at Tell-el-Amarna, perhaps the strangest city of ancient Egypt.

The Egyptian Exploration Society, excavating at Tell-el-Amarna, has been working particularly at the ruins of a suburb once occupied by everyday Egyptian citizens, whose customs are still much less understood than the glittering lives of the kings and nobles.

In a report of the excavations, by Henri Frankfort, he explains that the workmen's quarter was probably over-crowded. It consisted of a mass of small buildings, the best of which ran along two main roads, while others branched off along innumerable crooked pathways winding between granaries, chapels, and other buildings.

The plan of the better middle class homes called for a central room, serving as a reception hall, and behind this a corridor leading to the domestic apartments, so that the private life of the house was cut off from the official or public part. In one house an excellently preserved bedroom showed that the legs of the bed stood on conical stone supports to avoid sinking to the stone floor. Next was a bathroom with limestone bath and a tunnel for carrying off the bath water.

The city which the suburbanites were helping to build and beautify was one of the most remarkable projects of Egyptian history. About 1370 B. C. the young Pharaoh Akhn-Aton broke away from the traditional religion of worshipping Amon and many lesser deities, and declared that Egypt should worship one god only, Aton, the Sun's Disk. The Sun God, he maintained, gave heat and light to the world and was the one great creator and protector of the earth and all its people. Akhn-Aton ordered all the temples of the old god closed, their priests turned out, and the names of the gods hacked from the splendid temples and shrines.

To break entirely with the old regime Akhn-Aton journeyed down the Nile from Thebes to a new site and built a capital on virgin soil, which he called the Horizon of Aton—the place now known as Tell-el-Amarna. Here, a palace, temples

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MEDICINE

Physical Types And Disease

Slender children, even healthy ones, should be given special opportunities for outdoor life and athletics, in order to safeguard them from developing into shut-in personalities, according to Dr. Clifford B. Farr, of the department for mental and nervous diseases of the Pennsylvania Hospital.

Dr. Farr, who spoke before the American Psychiatric Association, at its meeting in Cincinnati, said that recent investigations made by him confirm work of other scientists to the effect that certain physical types tend to go with certain types of personality and certain abnormal mental conditions.

Physical measurements show that the slender bodily type is apt to be a quiet, reflective person, who fails to express his emotions and ideas in action. The stocky, sturdily built individual is more likely to express himself in action and more likely to be normally interested in other people and affairs about him.

Qualities of physique and temperament are inherited in the main, Dr. Farr said. But surroundings and experiences may cause some traits to become over developed or to be stamped out.

Pronounced physical types may be sometimes noted even in childhood, he has found.

"I am convinced that attention to physique may be of considerable value in the mental hygiene of childhood," Dr. Farr stated.

Sturdily built children are apt to be sufficiently interested in sports and other social activities, but children of pronounced long, lean type should be encouraged to develop social traits, he said.

A clue to the puzzling question of why one individual who takes syphilis develops general paralysis, and becomes a helpless mental and physical wreck, while another syphilis patient escapes this catastrophe, was suggested by Dr. H. A. Bunker, of the New York Psychiatric Institute at Ward's Island.

Dr. Bunker has taken extensive body measurements of 100 men suffering from general paralysis, or paresis, he told the psychiatrists. He also measured 64 normal men for purposes of comparison.

"We believe we have worked out a certain number of anatomical differences between paretics and non-paretics which appear to be significant differences, that is, they appear

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CHRONOLOGY

Moses' Calendar Urged

Moses, trained in the secrets of the Egyptian pharaohs, was the greatest calendar reformer of history. The long lost calendar plan which he gave to the Children of Israel offers help to modern astronomers, mathematicians, and churchmen who are trying to straighten out our imperfect system of reckoning time. These are the conclusions of Dr. Charles F. Marvin, chief of the U. S. Weather Bureau, and Moses B. Cotsworth, well-known advocates of calendar reform.

When Moses set out with the Israelites on their forty years' journey in the wilderness, he was well versed in calendar-making lore known to the Egyptian priest-astronomers and to members of Pharaoh's household. There is evidence in the Bible, according to Dr. Marvin and Mr. Cotsworth, that Moses used this knowledge to make a calendar based on the sun so exact that workdays and Sabbaths came round on the same fixed dates each year, so long as the Mosaic calendar lasted.

Each month had 30 days, and at the end of the year the five days needed to make 365 were added. To make the year always begin on the Sabbath and to keep anniversaries from slipping along one day later in the week each year, as they do in our calendar, Moses established two Sabbaths together at Pentecost. To keep the calendar adjusted to the sun, a leap-week was inserted at the end of each 28 years.

"Leaders of humanity have struggled in vain during many centuries to reproduce such a perpetual calendar," the calendar experts point out. "Although better than any calendar employed by any subsequent nation, it ceased to be used or was misunderstood by later priests and has been lost during about 2,500 years. But the significant fact remains, that through traditional usage the Jews generally continue to observe two consecutive days at the Feast of Pentecost."

In ancient civilizations the calendar system was kept secret from the people, who depended on the priests to tell them when to plant important crops and when to harvest; thus, the close connection between the people and the temple and its religious ceremonies was increased. When the Babylonians slew the priests and burned their archives in the destruction of Jerusalem in 587 B. C., the Mosaic calendar was lost, and the captives turned to the Babylonian sys-

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Moses Calendar

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tem of reckoning time, based on the moon.

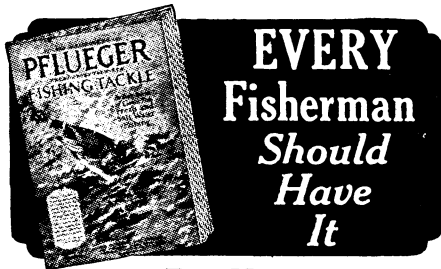
"Moses is the only calendar reformer known in history who succeeded in maintaining equal months, while fixing the dates for all seventh-day Sabbaths and festivals to recur on their same respective dates in every year," Dr. Marvin and Mr. Cotsworth find.

"The scriptures commanded the insertion of the extra day at Pentecost as an eighth day extension of the preceding week. Therefore, neither Jews, Christians, nor Mohammedans now seem to have reasonable grounds to oppose any action by the Calendar Committee appointed by the League of Nations towards recommending that the last day in December be named 'Year-day', and be inserted as an International Sabbath ending the fifty-second week in every year, with Leap-day, in like manner, inserted in the last week of June in Leap years."

The proposed calendar system which these two calendar reformers advocate, would have thirteen months of 28 days each. The League of Nations committee which has been considering plans for improving the calendar system did not, in its recent report, express a definite preference for this system or for the alternate proposal of using 12 months each 30 or 31 days long. Both plans have their advantage, which the committee pointed out.

Science News-Letter, July 2, 1927

The forest frog comes into the world as a perfect frog, the tadpole stage taking place in the egg.



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Physical Types

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not to be merely chance differences," said Dr. Bunker.

"It would seem, in short, that syphilitics who develop general paralysis are in some way a different kind of people from syphilitics who do not. What is here noteworthy is that one of the differences between them should consist in certain purely anatomical features, even though it be true that these anatomical differences are but an outward expression of, or merely coordinated with, a more deep-seated and fundamental difference, the full nature of which remains as yet obscure."

Science News-Letter, July 2, 1927

MEMORANDUM

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Egyptian Gods

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to Aton, homes, and many fine tomb-chapels for wealthy followers of the king were erected by armies of workmen.

The Sun Disk was worshipped throughout the city officially, as the discovery of numerous small shrines shows. These shrines, bearing the effigies of the royal family engaged in worshipping Aton, are scattered at points along the roadside, and in courtyards. But despite the Pharaoh's decree, in their homes the common people clung to the familiar deities to whom they appealed in the distresses of daily life—the god Bes, patron of pleasure, the Cow-eared Hathor, and the Hippopotamus Tauert, guardian of mothers.

Akhn-Aton's religious revolution was doomed to failure. At his death his daughter's husband, Tut-ankh-Aton, succeeded to the throne. But the power and plotting of dissatisfied priests and officials who preferred the old regime were too much for the young pharaoh. He went back to the worship of Amon and the rest of the gods, changed his name to Tut-ankh-Amon, and finally abandoned the beautiful new capital and returned to Thebes, with his court.

Discovery of a red crystalline sandstone head of the youngest of Akhn-Aton's daughters shows the same peculiar shape which has become familiar in portraits and the mummy of her father. The view that this peculiarly shaped head was not due to disease, as was at first suggested in the case of Akhn-Aton, but that it was a family characteristic, is supported by the new find, and also by the fact that the head of Tut-ankh-Amon is similar. So close is the resemblance that it is considered possible that Tut-ankh-Amon was not only the son-in-law but also the son of Akhn-Aton.

Science News-Letter, July 2, 1927

There are vast deserts out in the ocean in which no plant or animal life is found.

Four tons of worn out paper money are returned to the Treasury Department every day.

Twelve colleges in this country now give mental hygiene instruction and advice to their students.

Raising camphor trees is being tried out in Algeria.