

*FIELD SURVEYS OF ANCIENT MESOPOTAMIAN
IRRIGATION AND SETTLEMENT PATTERNS*

In charge: ROBERT M. ADAMS, Associate Professor of Anthropology, Field Director.

Techniques for tracing ancient canal systems from the adjoining mounds covering ruined settlements were first worked out by Professor Thorkild Jacobsen, formerly of the Oriental Institute staff, during excavations in the Diyala area east of Baghdad, Iraq, in 1936–37. In 1956–57 they were applied by Dr. Adams on a wider scale in the area of ancient Akkad, the northern part of the alluvial plain between the Tigris and Euphrates Rivers. This project, concerned in particular with locating the remains of ancient cities, towns, and villages that were occupied between 4000 B.C. and 1000 B.C. along former courses of the Euphrates River and its main offtake canals, was carried out jointly with the American Schools of Oriental Research. Subsequently, two briefer campaigns virtually completed coverage of the re-



Air photo of ancient canal system

gion between the Tigris and Euphrates from Samarra on the north to the ancient city of Nippur.

As a result of the concern of the Iraq Government to obtain a deeper understanding of chronic agricultural problems such as salinization, a much more comprehensive study was undertaken in 1957–58 which involved an elaboration of archeological surveys as one of its components. Under Iraq Government sponsorship, it was jointly staffed by the Oriental Institute and the Directorate General of Antiquities, and was under the overall direction of Professor Jacobsen. It included a program of textual studies, drawing its material from southern Mesopotamia as a whole, which aimed at analyzing the nature and productivity of ancient agricultural methods. Publication of these findings is planned by Dr. Jacobsen.

Intensive field studies in 1957–58 were concentrated in the lower basin of the Diyala River, an area in which members of the Institute staff had had many years of previous experience. Under the supervision of Sayid Fuad Safar and Sayid Mohammed Ali Mustafa, they included clearance of major irrigation works on the Nahrwan Canal system of Sassanian and Islamic times, as well as stratigraphic excavations in cities and towns adjoining this great ancient artery. Simul-

taneously a systematic survey was carried out, involving extensive use of aerial photographs, of all extant traces of ancient settlements and irrigation patterns in the Diyala basin. An interpretation of the results of this survey in the light of itineraries, tax records, and similar sources of regional history is being prepared for early publication by Dr. Adams.

In 1960–61 the focus of operations was shifted to the Khuzestan plain in southwestern Iran. With the co-operation and sponsorship of the Khuzestan Development Service, past patterns of urbanization and irrigation were studied by Dr. Adams in a large region where an ambitious new program of agricultural development is being completed. Further studies of a similar kind are planned.