

Władysław Kubiak

**GIZA CHANNEL OF THE NILE IN MEDIAEVAL PERIOD.
A CONTRIBUTION TO HISTORICAL GEOGRAPHY OF GREATER
CAIRO REGION**

The Nile in contemporary urban area of Greater Cairo flows for about 35 kilometres from the environs of Helwan to Shubra al-Khima. Geographically, this territory belongs to two different natural regions: Upper Egypt in the south, i.e. the relatively wide, although distinct valley between high escarpments of the Western and Eastern Deserts plateaux, and Lower Egypt, i.e. gradually widening upper Delta in the north. This situation probably partly accounts for changes of the river's course — a phenomenon well known to students of the history of Cairo urban complex. Accounts of this movements are to be found in the majority of works dealing with Cairo and its parts and published in the course of the last century (Clerget 1934; Kubiak 1987; Creswell 1960, 1972, 1984). Also plans have been published to illustrate these changes (Casanova 1919; Abu Lughod 1972; Kubiak 1987). They were mainly based on observations and historical investigation presented in the famous topographical *Opus* of al-Maqrizi (1853), the great Egyptian scholar of the 15th century. Unfortunately, neither al-Maqrizi's ideas nor modern reconstruction were fully discussed and critically interpreted by a qualified historical geographer. Neither it is a purpose of this paper: the material is too rich and complex to attempt its interpretation in a short article. Therefore only the Giza branch of the Nile and its west bank at the height of present-day Old Cairo i.e. historical Fustat, can be discussed. The reason for this is that the problem was almost totally neglected in older studies and that Giza and other parts of Greater Cairo situated on the western bank have progressively become more important in the spatial development of the Metropolis. Therefore, its historical topography gains wider interest.

Study of the source material which almost exclusively concerns the eastern parts of the agglomeration, much more important for the past of Islamic Egypt than any other urban unit, clearly indicates that the reconstruction of the historical river's western shore and its changes can only be approximate. The total absence of permanent landmarks which would survive to our times or which, could be at least hypothetically, situated within existing geographical context on the eastern side of the Nile, preclude cartographical presentation of the reconstructed

historical reality. In this respect, reasoning by analogy and in connection with the situation on the eastern bank in the proven chronological frames appears to be the only method to arrive at conjunctural conclusions.

The present river's geography in the area in question gives, however, at least one constant factor, i.e. existence for over 1500 years of an island, with more or less unchanged shore line called ar-Roda (*ar-Rauda* in literary Arabic), since the 12th century on, the name — or simply "the island" — which we accept for convenience even for earlier periods.

According to available sources, both written and archaeological, the main stream of the Nile in the early Islamic period (7th or early 8th century) was on the eastern side of ar-Roda, contrary to the present state when it is on the western side. The width of the eastern river's channel is well attested by the remains of the Roman fortress called by the Arabs *Qasr ash-Sham'*, allegedly built by Trajan and reconstructed in the 4-5th century still present in the centre of Old Cairo. In the period in question it overlooked the Nile and boats were moored against its walls (Kubiak 1987, pp. 45, 51, ff). The other bank made up the island ar-Roda with its defences no longer existing and the Nilometre at its southern end built in 861/862 A.D., which in excellent state of preservation still functions today. It probably was constructed to replace older Nilometre of the year 715 A.D. The uninterrupted, over eleven centuries history of the Nilometre proves remarkable stability of the island's contours at the southern end and its approximate extension. The distance from the preserved Roman fortress foundations to the Nilometre is about 400 m. and indicates the widths of the eastern branch of the Nile in early Islamic period. Equally wide must have been the western branch. The boat bridge which existed at the time of which we are well informed by the written sources gives clear indication of this fact. It was divided into two parts: one from the fortress to the island and one from the island to Giza. Both parts were constructed of 30 boats respectively which indicates equal length of two parts of the bridge (al-Maqrizi 1853, p.61). It, however, does not prove the depths and accordingly the volume of water flowing in both beds. Obviously, it was not equal. We infer it from an interesting information dated to the year 750 written by an eye-witness and relating the release of the Coptic Patriarch Michael from a prison on the island of Roda. After he was set free by population he — together with accompanying persons — crossed on foot to Giza (Seybold 1912, p.194). It occurred at the end of July when the Nile is at its lowest; it proves, however, that the western branch of it — although wide — must have been much shallower than the eastern bed. Nowadays and for about last one thousand years the situation was exactly opposite. The western channel has been the main one and navigable for the whole year, while the eastern one was drying up at the low Nile season.

The widening of the western channel, evidently progressing in the eighth and ninth centuries at the cost of Giza arable lands and built up quarters close to its shore, was paralleled by the shift of the main current of the river bed. This, of course, affected also depth of the river bed. Obviously, no soundings were

recorded to provide direct evidence of the phenomenon but we know of the damage done to the riverside, viz.: Abu Salih, a Christian author who compiled his work early in the thirteenth century, mentions at least one church at Giza built on the bank of the Nile which was destroyed and carried away by the current together with adjacent land, probably just after 750 (Evetts 1895, pp. 176, ff). More can be inferred from the works of mediaeval writers interested in topography and growth of Fustat. They mention, for instance, that a number of buildings were constructed on the new land left by the receding river already in the last quarter of the 7th century (Kubiak 1987, pp.44, ff). The process continued up to the middle of the 10th century when the eastern channel of the Nile completely disappeared and the digging of to the new river-bed became necessary to provide population with the drinking water. Before that they had to carry water from the distant Giza channel on the other side of the Roda island (Al-Maqrizi 1853, p.343). This narrative clearly indicates that all water was flowing at that time in the Giza branch of the river: evidently, what it lost in the east it gained in the west.

In later times silting of the eastern river-bed and its repeated clearing by human labour was also reported. However, it probably less concerned the Giza channel. It must have gained a certain equilibrium in the wider bed and minor changes in the east did not much affect its course. Only relatively restricted damages to the western bank are reported in the later times. Thus, for instance, the church of St. Victor had to be protected against the current and eventually, about the year 1180, had to be dismantled and the materials such as columns were carried away (Evetts 1895, p.174). Generally, in the later times the main river's movement shifted to the north. Even Cairo proper, the town founded in 969 in a fair distance from the Nile, was threatened and its riverside suburbs directly affected by a strong current meandering between the shores and more or less transitory islands and shoals. In the late 13th century and later it became necessary to undertake extensive and costly works on the shore and in the river-bed to protect settlements and low arable land from inundation. Also canals were constructed to take surplus of water at the time of annual flood. The works in the north, near Bulaq and its environs, aimed at diverting dangerous currents from the eastern bank. Similar works undertaken in the south, at the latitude of Giza and Roda had an opposite purpose: to direct waters to the east and the channel between Fustat and Roda deflecting it from the Giza bank. The latter works, on the whole, turned ineffective (Al-Maqrizi 1853, pp. 165, ff). The main stream of the river up to our times remains in the Giza branch which is between five and six hundred metres wide in contrast to only about 75. of the eastern channel. Certainly, modern embankments and nearly regular water-level ensured by Aswan dams secure stability of the two river-beds.

Historical information discussed above does not, unfortunately, provide enough ground for precise chronology and extent of the river movements. Alterations in the Giza topography region connected with this process are even less clear. It was yearly inundated and the Nile deposits had irretruvably consumed

all remains of architecture within the valley. Even constructions specifically referred to by the mediaeval authors: churches, mosques, strongholds or the famous Saladin's viaduct of over 40 arches and the six miles long causeway leading to it from the Nile cannot be traced. Shifting of the main stream of the Nile to the west commenced, as we know, already in the 7th century. At first, it was certainly influenced by the action of man: residue of the busy harbour and dumping masses of city's refuse in the river's eastern channel had durable effect but must have also coincided with natural tendency linked to water volume, its solid deposits, shaping of river islands, shoals etc. More accurate data could be provided by only minute geomorphological research, stratigraphical soundings or at least examination of retrieved material from the soil drilling performed in countless construction works, but this has never been done. In addition we have available documentation of unique value: records of the water level at its highest and its lowest going uninterruptedly for 14 centuries (such records for every year till the 15th century are given by Abu'l-Mahasin Ibn Taghribirdi, *An-Nujum az-Zahira* 1930-1970).

REFERENCES

- Abu Lughod J. 1972, *Cairo: One Thousand and One Years of the City Victorious*, Princeton.
- Abu'l Mahasin Ibn Taghribirdi, *An-Nujum az-Zahira*, 1930-1970, Vols I-XIII, Cairo.
- Al-Maqrizi, 1853, *Al-Khitat*, Vol. I-II, Bulaq.
- Casanova P. 1919, *Essai de reconstitution topographique de la ville d'al-Foustat*, Cairo.
- Clerget M. 1934, *Le Caire, Etude de géographie urbaine et d'histoire économique*, Vol. I-II, Cairo.
- Evetts B.T.A. 1895, (transl.) *The Churches and Monasteries of Egypt*, Oxford.
- K.A.C. Creswell, 1960, *Bibliography and Supplements* 1972 and 1984.
- Kubiak W. 1987, *Al-Fustat — Its Foundation and Early Urban Development*, Cairo.
- Seybold (ed.), F. 1912, *History of the Patriarchs*, Tübingen.