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# NEW DISCOVERIES IN ARABIC POPYRI II <sup>(1)</sup>

BY

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In my last lecture, given on May 20th, 1950, I gave a short account on the find of various leaves and fragments belonging to different fascicles of a tax-ledger found in Tebtynis in 1916. The researches concerning these very interesting texts, allowing an insight into the *internal* management of tax-money and book-keeping, are almost terminated, owing to the unfatigued cooperation of my colleague Prof. Dr. C. Leyerer, who contributed so much to the method of calculation and keeping accounts. I hope you will kindly allow me to put before you some of the most important new perceptions in this field.

Inspired by this unique find, I have, of course, looked out for parallel materials preserved in various papyrus-collections; as I have now different papyri at hand, which are closely related to the Tebtynis-ledger, I made a selection of texts to be proposed here.

There is first of all a papyrus in the Archduke Rainer Collection in Vienna, Inv. Ar. Pap. 5999 <sup>(2)</sup>, a large folio-sheet, 59.3 × 30 cm. and therefor of an exceptional size, certainly belonging to a big tax-ledger.

Obviously this papyrus had already attracted the attention of my master Prof. Dr. Joseph von Karabacek, who entirely deciphered the text on Verso for this planned « Corpus » of Arabic Papyri in 1896 and referred to it in his review of L. Abels publication of the Arabic papyri in the State-Museums in Berlin <sup>(3)</sup>. His son in law, Dr. K. W. Hofmeier, then

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<sup>(1)</sup> Communication présentée en séance du 2 février 1953.

<sup>(2)</sup> Cf. *W.Z.K.M.*, XI (1897), p. 11. The papyrus is referred to here under its old inventory number 18274.

<sup>(3)</sup> *W.Z.K.M.*, XI (1897), p. 11.

dealt with it in 1913 in his article *Beiträge zur arabischen Papyrusforschung I* <sup>(1)</sup>, a remarkable contribution to our knowledge of Arabic tax-accounting, but he did not recognize the nature of the first two columns called *x* and *y* by him and the relation between the different entries. I have then published the whole text in 1941 <sup>(2)</sup> together with important remarks by Prof. C. Leyerer on the nature of this ledger-fragment.

It was found in el-Ašmûnain in Upper Egypt in 1886 and deals with the impost collected in the villages of Maisâra (ميسارة) and its hamlets (كفور), in Apanub (ابانوب) and in Qûş (Cusae, قوص) and its estates; all these places are situated in the old *kûra* of Ašmûn, south to the capital of al-Ašmûnain. Maisâra and its hamlets and Qûş are also mentioned in a small paper fragment in the Rainer Collection (Inv. Chart. Ar. 1777), dealing with tax-arrears of considerable amount, in some relation to our text on recto, while the Estates of Qûş (الضياع القوصية) are mentioned in another paper of the same collection (Inv. Chart. Ar. 25616).

The *recto* shows a *balance of the income* from fees and taxes, assessed in the afore mentioned villages, drawn up in two separate balance groups :

I) arranged according to the three villages with a specification of the different kinds of tax-payments <sup>(3)</sup> and the total-sum of the payments effected by each village (lines 1-22).

II) arranged according to the various posts of income of the fisc, as polltax (جالية), tax on meadows (مروج), pasture-tax (مراعى), palm-tax (نخل), fishing-licence (مصايد) and charges on trade, as bath-tax (الحمام ll. 25, 40) and tax on an oil-press (معصرة الزيت ll. 27, 50). The total amount from each village is again added.

The outline of this balance looks quite modern and corresponds, in the essentials, completely to our *balance-sheets*.

<sup>(1)</sup> *Islam* IV (1913), pp. 97-120.

<sup>(2)</sup> *Arch. Or.* XII (1941), *Beilage* VIII and pp. 92 ff.

<sup>(3)</sup> Poll-tax (الجوالى), pasture-tax (المراعى), tax on meadows (المروج), palm-tax (النخل), garden-tax (المبقال), and fishing-licence (المصايد).

On the verso we find an assemblage of the tax-issue from a certain district—probably Qûş—according to the account (conto) of the individual tax-payers, which was destined as a preliminary *substratum* (or basis) for the annual balance account, made in the respective district finance-office, probably in al-Ašmûnain.

This assemblage contains, arranged in columns,

I) In front of the names of the individual tax-payers, *i.e.*, on the right margin, the amounts paid for *şarf* (صرف)—conversion-charge—calculated probably for *poll-tax*; these amounts oscillate between one carat,  $\frac{1}{2}$  carat,  $\frac{1}{2} + \frac{1}{3}$  carat,  $\frac{1}{2} + \frac{1}{3} + \frac{1}{12}$  carat,  $\frac{1}{3}$  carat,  $\frac{1}{6}$  carat,  $\frac{1}{6} + \frac{1}{12}$  carat and  $\frac{1}{12}$  carat.

II) After the name of the tax-payer appears the charge for drafting a tax-receipt generally  $\frac{1}{96}$  of a dînâr (3 fils), but also  $\frac{1}{3} + \frac{1}{12}$  carat,  $\frac{1}{4}$  carat or  $\frac{1}{12}$  carat. These two columns are *without* headings. Then follow the individual headings.

III) Silver-money (الوَرِق).

IV) Deductions (الوضائع).

V) Conversion-charge (الصرف).

VI) Charge for receipt (quittance-fee, البراءة).

VII) Remainder (بقي).

VIII) Land-tax (الخراج).

IX) Poll-tax (الجالية).

X) Pasture-tax (المراعى).

XI) Tax on meadows (المروج).

The columns II<sup>(1)</sup> and VI (البراءة) call for comment, as both concern the charge for drafting a receipt (quittance-fee).

We know this charge from the Greek papyri, where two obols were charged for a receipt in the Augustan period (5 B.C.)<sup>(2)</sup>. But here almost regularly the same amount is levied *twice*. The explanation,

<sup>(1)</sup> The character of this column, called  $x$  by K. W. HORNEMER, *op. cit.*, p. 104 f., was not recognized by him.

<sup>(2)</sup> Cf. L. C. WEST and A. C. JOHNSON, *Currency in Roman and Byzantine Egypt* (Princeton, 1944), p. 6.

supposed by C. Leyerer is, that the amount, paid by the tax-payer to the tax-collector for a receipt issued by him, was entered under heading VI (البراءة). This amount was balanced by the fisc at the end of the year with the tax-collector together with other fees (صرف, أُجْرَة), which the latter could deduct from the tax-money gathered, as we shall see from P. Michaelides, no. 121. But the fee for receipt, which was issued by the tax-office *directly* to the tax-payer and had therefore an official character, was entered under heading II.

The amounts in heading I, IV (وضائع), V (صرف) and VI (براءة) are calculated on the basis of the amount in column VII («there has remained», (بقي), and the latter plus the amount of the other tax-categories including I and II are summed up in heading III (الورق). The entries under «poll-tax» and «remainder» are equal in the majority of cases.

Ṣarf (صرف) shows a definite relation to the «deductions» (الوضائع) here and in the Tebtynis-ledger, as far as these charges are mentioned together. It forms a charge, which the fisc granted to the tax-collector (or tax-farmer) probably as a compensation for the risk he had to run when guarantying with all his means the delivery of the tax-money collected at a fixed term and in full-weight standard money (مثقال). As we shall see from P. Michaelides no. 121, this charge formed a deduction in favour of the tax-collector in the tax-accounts, and was balanced to his credit.

The meaning of the word ṣarf (صرف) corresponds to Greek συναλλαγή, a charge for conversion of the private to the public standard in Oxyrhynchus, and substantially perhaps to the προσδιαγραφόμενα «fee for exchange» in connection with the practice of converting from the bronze to the silver currency<sup>(1)</sup>. But whether both Greek terms *really* correspond to ṣarf, is doubtful. It seems that an operation connected with the labourious conversion of the small and smallest amounts paid in copper and silver currency into the gold standard in tax-accounts, in use since

<sup>(1)</sup> Cf. L. G. WEST-A. CH. JOHNSON, *Currency*, pp. 45, 148 f.

Emperor Justin I in Egypt (518-527 A. D.)<sup>(1)</sup> and carefully continued under the Arab administration, might have been originally intended.

The rates for *ṣarf* differ considerably. One carat per dinâr occurs in *PERF* no. 715 verso, *PER* Inv. Ar. Pap. 3098, 11079<sub>4-5</sub>, *APH* no. 12 a lines 6-8, 1 1/2 carat in a paper of the Rainer collection, in the Tebtynis-ledger, in *PER* Inv. Ar. Pap. 3098 and in *PERF* 715 verso. It is striking that the same amount was calculated in Oxyrhynchus<sup>(2)</sup> as conversion charge. But also other rates, as e.g. 3 carats, even 6 carats are booked in Arabic papyri (e.g. in *PERF* no. 715 verso). There are further variations of *ṣarf* according to the character of the tax involved and the place, on which it was assessed :

- 9 % generally on land-tax;
- 27 % on the tax on meadows in Qûṣ;
- 31 % on the tax on meadows in Maisâra;
- 38 % on the tax on meadows in al-Kufâr.

A similar papyrus is *PER* Inv. Ar. Pap. 3098. It shows, after the individual names of the tax-payers, the following headings :

VII	VI	V	IV	III	II	I
].. المرسل	المروج	بقي	الصرف	الوضائع	الورق	
].. Sent in	tax on meadows	remainder	conversion	deductions	silver-money	charge

Whereby the total of the amounts under the headings II to IV («deductions, conversion charge, remainder») gives the amount under heading I («silver money»). The sixth column («sent in» المرسل) regularly differs from the amount in «silver money»; it is generally lower, sometimes a little higher. The total of each column is added below.

To this group finally belongs a half-sheet of a tax-ledger, preserved in the papyrus collection of Mr. George Michaelides (no. 121). The

<sup>(1)</sup> Cf. L. C. WEST-A. CH. JOHNSON, *Currency*, p. 127.

<sup>(2)</sup> Cf. *ibid.*, p. 149.

account is arranged in six columns : I. [الورق] « [silver mo]ney », the amount received in cash, II. الأجرة « collector's convenience <sup>(1)</sup> » and III. الوضائع « deductions », allowances, required by the tax-collector for his activity and therefore to be deducted from the amount in column I, IV. [المشقال] the difference resulting from this operation, V. الصرف « conversion charge, VI. الخالص « net amount ». The amount in column V (الصرف) is deducted from the amount in column IV (المشقال), and the rest constitutes the sum to the favour of the fisc, which is balanced with the fisc by the tax-collector.

Among the papyri, bought in 1934 by Prof. Dr. A. Vogliano in the Fayyûm —coming perhaps from Tebtynis or Medînet Mâdî—there is a quire of about the same size and in a script very similar to that of the Tebtynis-ledger, P. Mil. Ar. 55, now in the papyrus Collection of the University in Milan. As I have only a photograph of this sheet at hand, the decipherment of the text was somewhat difficult, but finally almost the whole text could be read. This large papyrus sheet is also folded in the middle and represents a quire of a cash-book, similar to P. Cair. B. É. Inv. no. 1400. Payments, made by various persons, are entered in five parallel columns, the headings of which are unfortunately *all* lost, and the total of the individual payments is summed up at the bottom of each column. A careful comparison of these entries with those in the Tebtynis ledger has enabled Prof. C. Leyerer to restore the missing headings; they are :

I. المشقال (« standard value »), II. القِطْع (« fee for small change », similar to the expression الكسور), III. الوضائع (« deductions »), IV. الصرف (« conversion-charge ») and V. المرسل (« money sent in »).

The entries under these headings were effected on the basic calculation of  $1/12$  to  $3 \frac{1}{6}$  carat for each 20 carats.

<sup>(1)</sup> A charge, also occurring in Greek papyri, cf. L. G. WEST-A. CH. JOHNSON, *Currency*, p. 146.

This method was somewhat difficult, and even errors in summing up can be established. So in line 4 of the left side on verso the total of the entries in lines 5 to 9 is actually  $42 \frac{1}{3} + \frac{1}{8} + \frac{1}{24}$  dinâr and  $\frac{1}{4}$  carat, but the clerk entered  $39 \frac{1}{4} + \frac{1}{3}$  carat,  $\frac{1}{12}$  carat,  $\frac{1}{24} + \frac{1}{48} + \frac{1}{12}$  carat,  $5 \frac{1}{3} + \frac{1}{6}$  carat, which makes up  $44 \frac{1}{4} + \frac{1}{24} + \frac{1}{48} + \frac{2}{3}$  carat and so differs by almost two carats surplus.

A further papyrus, equally found in the Fayyûm, is *PER* Inv. Ar. Pap. 3373, also belonging to a tax-ledger, booking land-, pasture-, and poll-tax-payments from various villages in the Fayyûm. Unfortunately the text is much damaged.

Another ledger-fragment is *PER* Inv. Ar. Pap. 3092. The payments are entered under the following items : total, land-tax, poll-tax, tax on meadows, pasture-tax and fishing-licence. Finally *PER* Inv. Ar. Pap. 3094 gives payments for palm-tax, poll-tax, pasture-tax and tax on meadows, and it is further remarkable for the fee for small change (القطع). often occurring in the Tebtynis ledger.

I now turn over to another matter, concerned with the tax-ledger from Tebtynis, the *administration* of the tax-money entering the local head tax-offices and its investment in agriculture.

We already know that the charge, called الفلآت in the Tebtynis-ledger, possibly means a redemption (ἀπαρτυρισμός) in money of a corn-loan, granted to the farmers as an advance and repaid or deducted in money after the harvest.

As this term occurs in a tax-ledger, the loan must have been effected by the fisc. So some words are to be said about the superintendence of corn-trade and traffic by the State.

We know from P. Heid. III no. 2, that there was no *free* trade in corn under the Arab administration of the Umayyad period. First of all came the requirement of the State for maintenance of army and fleet, for the victualling of the population and special for the supply of Mecca and Medina. So, in the Heidelberg-papyrus the corn-dealers are ordered by Qorra ibn Šarîk to bring 50 % of the corn bought by them to al-Fustât. From another papyrus of the same time, recently acquired by Mr. George Michaelides (no. 115) we see that the content of the *local barns* was carefully registered. The price was fixed, and also that portion of the corn,



which remained after delivery of the quantity destined for the corn-tax (embola, ضريبة الطعام), had to be sold at a limited price. The farmers, always in need for money and even not able to buy the necessary seed-corn for their fields, received this from the fisc—that is the meaning of تقوية in P. Michaelides no. 4—and had to repay it after the harvest in a money-equivalent (ἀπαργυρισμός), whereby no doubt the fisc made a handsome profit.

One of the most important papyri concerning the financial administration of Egypt belongs to the collection of H. E. 'Abd al-Wahhâb Hasan Husny Pacha (A). The large papyrus-sheet, 25.7 × 57 cm, folded in the middle and obviously belonging to a ledger, contains an account of tax-money written by a sub-official of the tax-office by order of his superior, a paymaster (ḡustâḡ), concerning taxes which he had received from various persons in the village of Tawâb (طواب) in Messori (Ġumâdâ I, II) 147 A.H. (August-September, 764 A.D.). This papyrus is not only remarkable as offering various details about the method of book-keeping and the exchange of the money collected, but especially as furnishing for the first time interesting informations about the activity of the individual tax-officials, the collector (قبال), paymaster (جسطاز، قسطال), the local finance-director of the district (كورة) and his subordinate in the individual villages, the *mâzût* (μαζότερος, مازوت).

It was the merit of Prof. Dr. Karl Wessely in Vienna, to have recognized the title of the latter for the first time in a well-known passage in *al-Maqrizî's* *Ḥiṭāṭ* <sup>(1)</sup>, where S. de Sacy's manuscript offered the puzzling title ماروتها instead of أمراءها. He corrected ماروت in مازوت and connected it with μαζων, occurring together with μαζότερος; ΜΙΖΟΤΓΡΟΣ in Greek and Coptic papyri. C. H. Becker, who then definitely established the reading مازوت as the only one possible, equated this *mâzût* with the protocometes» head of a village «(Dorfschulze) and the Coptic λαουληγ, who corresponds to the μαζότερος, according

<sup>(1)</sup> Ed. Bûlâq, I, p. 777, ed. Cairo, 1906, I, p. 123 22 ff., cf. J. v. Karabacek's review of B. Moritz's Arabic Palaeography, *WZKM* XX, p. 144, note 2.

to Dr. W. E. Crum<sup>(1)</sup>. There is no doubt about the identity of the *πρωτοκωμητής* and the *ΛΑΩΛΑΝΘ*, as Artur Steinwenter has proved<sup>(2)</sup>.

As for the Arab period it was already known from the passage in the *Ḥiṭat* that he cooperated in the committee which had to investigate the capacity of bearing of the individual villages concerning the tax-quotas apportioned to them and an eventual increase. It further resulted from *NPAF* no. 3<sub>28</sub> that he had to do with collecting tax-money, as he is ordered to take it over according to the standard weight of the Central Treasury only. He further distributes rough materials (iron) of the State among the blacksmiths to be made up into nails, chains etc. according to the system of corvee (forced labour, *λειτουργία*)<sup>(3)</sup>. He had also to help in provisioning and recruiting sailors for the fleet, or workers for forced labour<sup>(4)</sup>, to guarantee for fugitive peasants<sup>(5)</sup>, to acquit tax-payments to individuals<sup>(6)</sup> and to deliver the tax-amount collected in their villages destined for the *δημόσιος λόγος*<sup>(7)</sup> or treasury in the Capital. They further had also to act as arbitrators in private litigations<sup>(8)</sup>. It is clear that these men, acting at the same time as *ὑποδέκται* in their villages<sup>(9)</sup>, had as great a power as the *ʿomde* had in the time of Mohammed ʿAli in his community, and that they obviously sometimes abused this power. So we learn from an Arabic papyrus of the Aphrodito-find<sup>(10)</sup>, that the *مازوت* had entered the house of a peasant by force and had appropriated his property illegally. The peasant complained to the Governor Qorra ibn Šarīk, who ordered the pagarch Basil,

(1) C. H. BECKER, *Islamstudien*, p. 166, 171, 253, *PAF* no. 2 (p. 76).

(2) *Orientalia*, IV, 1935, p. 385.

(3) *PAF*, n° 93.

(4) *P. Lond. IV*, n° 1356<sub>15-17</sub>, 1420.

(5) *P. Lond. IV*, n° 1494<sub>42</sub>, 1499<sub>19</sub>, 1459, 1551.

(6) G. ROUILLARD, *L'administration civile de l'Égypte byzantine* (Paris, 1928), p. 96, note 11, 108, note 6.

(7) *P. Lond. IV*, n° 1565, 1570. Cf. *P.E.R.F.*, n° 586, where *Μακάριος, μισίων* of the *χωρίον Παντικού* paid in on account of the public taxes (*χρυσικά δημόσια*).

(8) G. ROUILLARD, *op. cit.*, p. 156 and note 8, 217.

(9) Cf. *P. Lond. IV*, n° 1570 (708-709 A.D.), p. 487.

(10) *PAF* n° 2.

to keep the *μειζοτες* away from the houses of the inhabitants. We further see that these *mawâzît* are almost all Christians (Copts), and that in spite of a severe ordonnance issued by the Caliph 'Umar ibn 'Abd al-'Azîz about 100 A.H. <sup>(1)</sup> that all Coptic *mawâzît* in the villages should be replaced by Moslems, a Coptic *mâzût* as well as a Coptic collector (قبال) are mentioned together with a Moslem as secretary in a papyrus of the Schott-Reinhardt-Collection in Heidelberg (PSR 431<sub>1-2</sub>), dated 171 A.H. (787-788 A.D.).

Now P. Husny Pacha A clearly shows the way, which the collected tax-money took : the collector (قبال) delivered the tax-money to the finance office of the district (*kûra*), the *mâzût*, representing his village community collectively and standing guaranty for it at the head of the *kûra*, paid the collected amount to the *qustâl* (paymaster) of the *kûra*-finance-office (*diwân*), a second paymaster (*ġustâd*) orders his subordinate colleague to enter the amount received in the tax-ledger, and the director of the district-finance-office (عامل) transfers the money to the Central Treasury in al-Fustât.

All these papyri allow an insight into the *internal* management of the tax-money and the book-keeping which is concerned with the settling of the accounts between the local-tax collector and his superior office.

The whole method of book-keeping is astonishing high, surpasses by far such in the previous Greek and Byzantine administration, and requires a perfect knowledge in the calculation of fractions. The calculating of the individual charges according to a certain percentage and a fixed relation to a basic amount seems to have been impossible without the help of *tables*.

We know that such tables were at hand in the Byzantine administration in Constantinople <sup>(2)</sup>, and we have to surmise, that similar ones existed in Egypt in the Byzantine as well as in the Arab periods,

<sup>(1)</sup> AL-KINDI, *Kitâb al-Wulât, wa-Kitâb al-Qudât*, p. 69; cf. C. H. BECKER, *Islam*, II (1911), p. 363 f.

<sup>(2)</sup> Cf. F. DÖLGER, *Beiträge zur Geschichte der byzantinischen Finanzverwaltung besonders des 10. und 11. Jahrhunderts* : *Byz. Archiv*, IX (1927), pp. 56, 75.

although no papyrus of this kind has been discovered yet. But the Coptic calculation manual, dating from about 900 A.D. and published by J. Drescher <sup>(1)</sup> gives an idea of what kind of subsidiary materials could have been used under the Arab administration.

Although not all problems could be cleared in a sufficient way, the research, devoted to the administrative papyri, is going on successfully, and a field completely new, could be made accessible, about which we hitherto had only hazy notion. A find like that of the tax-ledger from Tebtynis, has turned out to be most valuable for our still imperfect knowledge of the Arab financial administration of Egypt, and it is to be hoped, that further finds may bring the solution of the last problems which are still pending.

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<sup>(1)</sup> *B.S.A.C.* XIII (1950), pp. 137-160.

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