

Quantifying Literacy in the Early Roman Arsinoitês: the Case of the *Grapheion* Document^{1,2}

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In Ptolemaic, Roman and Byzantine Egypt, parties to transactions documented by a written contract were often required to authenticate in their own hand the terms of the contract. The section in the document in which they did so

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² Drawing evidence from documentary papyri about levels of literacy among Greeks and Romans in eastern Mediterranean lands began to occupy historians at about the time that papyri themselves were first being unearthed in Egypt. The early study by Ernst MAJER-LEONHARD in 1913 did not stimulate much interest, nor did a second discussion by Rita CALDERINI in 1950. It was only with a series of publications by H.C. YOUTIE between 1966 and 1975 (1966, 1971a, 1971b, 1975a, 1975b, 1975c), that the study of literacy as evidenced in the papyri from Roman Egypt became more sophisticated and began to interest a wider audience. Finally, the publication of *Ancient Literacy* by HARRIS (1989), an Italian resumé of which was published in 1988, aroused heated debate as to what the likely levels of literacy were in antiquity; what preconditions were necessary for literacy; what factors were likely to have influenced its enhancement or decline; how reading and writing were taught to children. Detailed and useful discussion of scholarship on literacy published since the appearance of Harris' book, is provided by WERNER 2009, especially at 343 [bilingualism], 345 [Egypt], 347 [literacy/illiteracy], 349 [Oxyrhynchus].

was termed *hypographê*.³ Since not all contracting parties were literate, the authentication could be written by another, provided that the document explicitly noted that this was the reason for inserting an additional individual into the transaction.⁴ The number of contracts recording the *hypographê*—no less than 1350 legal documents with this clause are currently registered in the databank *synallagma*—is adequate to sustain an investigation into literacy levels among those inhabitants of Ptolemaic, Roman and Byzantine Egypt who habitually made use of writing for their contractual agreements, whether they themselves were literate, or were illiterate and of necessity employed a literate scribe.⁵ The object of this paper, then, is to canvass the 316 *hypographai* written to authenticate provisions of contracts during the first three centuries CE of Roman rule at the public office for written records called the *grapheion*.⁶

The practice of inserting *hypographai* into contracts is already attested early in the Ptolemaic period. From the early second century BCE onward, parties to contracts recorded as double documents customarily confirmed in their own hand the contract's terms.⁷ The text of the *hypographê* was short in these days, about 10 to 15 words of a very simple sentence, and the intended users of the contract, Greek men, were expected to qualify.⁸ This is frequently the case, although by no means always so: in roughly half the cases—eight out of a total of nineteen—the parties to the contract require another person to write their *hypographê*.⁹ As early as the Ptolemaic period, then, the double

³ WOLFF 1978, 164-166; DEPAUW 2003, 89-105.

⁴ Cf., e.g., P.Tebt. I 104 = MChr 285 (92 BCE—Kerkeosiris) ll. 38-43: Φιλίσκ[ος] Ἀπολλωνίου Πέροσης τῆς ἐπιγονῆς | ³⁹ ὁμολογῶ ἔχειν τὴν φερνὴν τὰ δύο τάλαντ[α] | ⁴⁰ καὶ τὰς τετρακισχίλιας δραχμὰς τοῦ χαλκοῦ καθότι προέγραπται καὶ τέθεμαι | ⁴¹ [τὴν συγγραφήν κυρία]ν παρὰ Διο[νυ]σίωι. ἔγραψεν ὑπὲρ αὐτοῦ Διονύσιος Ἐρμαίσκ[ου] | ⁴² [ὁ προγεγραμμένος διὰ τ]ὸ αὐτὸν μὴ ἐπίστασθ[αι γρά]μματα.

⁵ http://synallagma.tau.ac.il/ArtLogon.aspx?project=GLRT&username=u_hypographe+general-2&password=UQVVVDQUABGSHOSMWIYKL

⁶ On the *grapheion* in general, cf. WOLFF 1978, 86-91; YIFTACH-FIRANKO 2014, 41-43; CLAYTOR 2013, 78-81.

⁷ The autograph confirmation is already inserted into some third century documents (P.Sorb. I 17, scr. ex. 21-25, 257 BCE, Mermertha) and perhaps even earlier (Athens, fourth cent. BCE, [Dem.] 35.15.3), but seems to become a regular component of the double document around 170 BCE at the latest. Cf. P.Tebt. III.1 818 (174 BCE, Triklómia), and also P.Mich. III 183 which is the *hypographê* of no. 182 (183 BCE, Arsinoitês).

⁸ This assumption is based largely on the text of BGU XIV 2367 (III BCE, Alexandria), a regulation regarding, *inter alia*, the nomenclature for parties to contracts recorded in double documents: all except citizens of Alexandria were required to supply the name of their *patris*, that is, a *polis* or region in the Hellenistic Greek world from which they originated. I study the phenomenon in detail in YIFTACH-FIRANKO 2014a. On literacy and Greek *paideia* in Ptolemaic Egypt, cf., e.g., THOMPSON 1994, 75-78; P.Count., 124-133.

⁹ Autograph *hypographê*: BGU VI 1271 (180-145 BCE, Philadelphia or Theadelphia); XIV 2390

document could be employed by an illiterate with the assistance of someone else able to write.

Once we approach the early Roman *grapheion* the data become sufficiently abundant to provide a statistically more reliable picture. As shown in Chart 1 below, illiteracy is not merely an option; it is now the rule. This proved to be true for almost every type of document I surveyed, both Roman and Byzantine.¹⁰ Almost three-quarters of the extant *hypographai* written up at a *grapheion*, that is, 235 out of a total of 316, were not composed by the contracting party him- or herself, but by another individual who was able to write. Expressed another way, from the total of 316 no more than 81 individuals were literate and wrote the *hypographê* in their own hand. The chart also draws attention to one probable cause of the apparent dip in the level of literacy: women are now more in evidence and they comprise no less than about one-third of the authors of *hypographai*, yet few indeed are capable of authenticating *hypographai* with their own hand—only seven out of 104. Among men the ratio is 1 out of 3.

The levels of literacy also vary depending on the community in which the document was drawn up—metropolis or village, large village or small: see Chart 2 below. Among the 19 men who incorporate their own *hypographê* into documents written up at the *grapheion* in Ptolemais Euergetis, capital of the Arsinoite nome, as many as eight are authored by the contracting party. This is not sufficient evidence for statistical purposes, but evidentiary material from Tebtynis is, and with its remarkably similar literacy rate, gives us a larger number—29 out of 66 are able to write the authenticating *hypographê* for themselves.¹¹ Quite a different picture is provided by source material from So-

(160/59 BCE, Hêrakleopolîtês); 2395 (221 BCE, Takona); P.Bad. II 2 (130 BCE, Hermônthis); P.Dion. 13 (112 00, Akôris) [the same person also in nos. 14-21]; P.Oslo III 140 = C.Ptol.Sklav. I 20 (112 BCE, Tebtynis); P.Tebt. I 105 (103 BCE, Kerkeosiris); III.1 819 (171 BCE, Oxyrhyncha); SB XVI 12372 (161 or 153 BCE, Arsinoîtês); XX 14108 (early II BCE, prov. unknown); UPZ I 125 (89 BCE, Memphis). Allograph *hypographê*: BGU VI 1271 [for both parties] (180-145 BCE, Theadelphia/Philadelphia); P.Dion. 16 [for one of the borrowers] (109 BCE, Akôris); P.Erasm. 14 (mid II BCE, Arsinoîtês); P.Hamb. I 58 (83 BCE, prov. unknown); P.Tebt. I 104 = MChr 285 = Sel.Pap. I 2 (92 BCE, Kerkeosiris); P.Würz. 6 (102 BCE, Theadelphia); SB VIII 9679 (after 146 BCE, Euhêmeria?); XX 14108 (early II BCE, prov. unknown).

¹⁰ Thus, for example, in Byzantine contracts of sale, all of which are dated after the beginning of the fourth century, all nine women vendors are illiterate; this is also the case in eleven contemporary contracts of loan with female borrowers. Compare also HARRIS 1988, 15, 21. An instructive introduction is provided by COLE 1981, corroborating this picture of widespread illiteracy among women; cf. also CALDERINI 1950. A key source for assessing literacy among women is, of course, letters authored by them. Cf., in particular, CRIBIÖRE 2002; ILAN 2005, 177-180; BAGNALL & CRIBIÖRE 2006, 48-55. A more optimistic view as to the diffusion of literacy among women, based on literary sources, inscriptions, and graffiti from the Roman West, is expressed by MANO 2008, 208.

¹¹ The singularity of Tebtynis' high levels of literacy is also reflected in the quantity and quality

knopaiou Nêsos, for in that village women and men alike are overwhelmingly illiterate: just one male out of the 28 who were contracting parties recorded in a *grapheion* document at Soknopaiou Nêsos writes his own *hypographê* in person.¹² Similar figures can be given in the case of women.

Another key factor is the length of the *hypographê* being written: see below, Chart 3. As indicated earlier, the text of a Ptolemaic *hypographê* tends to be short, measuring some two lines with ca. 10-15 letters of text.¹³ Such *hypographai* are also well attested among documents composed at *grapheia* in the Roman period, and the literacy rate exhibited in them, insofar as men are concerned, is even higher than the Ptolemaic results. One of every two short *hypographai* written by a man was drafted by the contracting party himself.¹⁴ But in the Roman *grapheion*, short *hypographai* account for no more than one-third of the total. When we approach a subsequent length-group in which the *hypographai* consist of four to six lines, the literacy rate drops to slightly above 25%. This is also the case when the *hypographê* becomes even longer: 27% in *hypographai* measuring seven to nine lines, and slightly less than one-quarter in contracts measuring 10 lines or more. According to this analysis, while 50% of all men were able to draft a modest-size *hypographê* on their own, only one-quarter were capable of doing so once the amount of text became significantly longer. We are no doubt looking at the slow writers (βραδέως γράφων/γράφουσα), a group studied by H.C. Youtie forty years ago, making use of particular test cases.¹⁵

The above figures are surprisingly high. Were we to rely on D. Rathbone's figures for the Ptolemaic period, 36,500 adult males,¹⁶ as indicative of the size of the population in the Roman period as well, we could postulate the availability of as many as 8,500 'real' literates, that is persons who were able to draft a Greek text of considerable size. This high figure is of far reaching cultural ramifications, for example for a study of the breadth and depth of Helleniza-

of literary papyri, both Egyptian and Greek, unearthed from Tebtynis, when compared with other Fayum villages, especially Soknopaiou Nêsos: see VAN MINNEN 1998. The question of literacy within a particular locality should likewise focus on individual archives, some of which provide the finest samples of autograph *hypographai*. Cf., e.g., P.Fam.Tebt. 22.20-30 (122 CE, Tebtynis). Cf. <http://www.trismegistos.org/arch/archives/pdf/192.pdf>.

¹² Cf. SAMUEL 1981, 396-397; JORDENS 2005, 48 with n. 25. Methodologically important is HANSON 1991, 178-179.

¹³ Cf. *supra*, p. 260.

¹⁴ Remarkably similar results were reached by STEINMANN 1971, in particular 357.

¹⁵ E.g. YOUTIE 1971b, with an account of the contractual parties designated as slow writers in the documents, as well as those who can be assigned to that same category on palaeographic grounds. Cf. also, more recently, KRAUS 1999, 89-90.

¹⁶ RATHBONE 1990, 113.

tion in the Arsinoite nome during the early Roman period. A high number of literates could also be significant for the study of provincial bureaucracy at various levels. Smooth functioning of the provincial government was based on the continuous circulation of information, in particular, the myriad reports about population, property, and revenue that flowed from one bureau to another throughout the nome.¹⁷ Those who crafted the various reports needed to be in possession of basic arithmetical and measuring skills, to be competent in tachygraphy, as well as to be acquainted with the highly diversified terms used for the categorization of land, revenues and population in the early Roman period. If the above 8,500 literates were competent, or at least could be made competent within reasonable time to issue these reports, then it is perhaps possible to arrive at an approximation of the pool from which scribes and other skilled personnel could be drawn.¹⁸

This would however be the case only if we could establish: (a) that data provided by the *grapheion* documents accurately represent the population of the nome under scrutiny and (b) that all those who were able to write a long passage also possessed the requisite skills to produce a legible text of reasonable quality. I shall start with the first question: to what extent are the data provided by the *grapheion hypographai* representative of literacy levels in the population of the Arsinoite nome in general? A useful comparandum comes from the *hypomnêma*, an application for lease, commonly of land, addressed by the lessee to the lessor, which became the default instrument for the documentation of land leases in the first century Arsinoitês and remained popular through late antiquity.¹⁹ Into these documents, the lessor, and at times the lessee, inserted his *hypographê*. What they wrote was quite short, about the same size as the texts written out in their own hand by more than half of the

¹⁷ A useful tool for the study of offices attested in a given village during the Roman period is provided by CALDERINI & DARIS 1935-, e.g., IV 381-382 (Tebtynis) as well as, more recently, BENAÏSSA 2012, e.g., 93-100 (Thôlthis).

¹⁸ How many scribes were required for the operation of state bureaucracy in the Roman period? Take, for instance, one routine functionary, the *sitologos*. *Sitologoi* are attested in the Roman period in as many as 72 Arsinoite villages, and their number was probably many times larger, perhaps twice as many. Assuming a total of four *sitologoi* per village, and their accompanying scribes (cf. OERTEL 1917, 251-252), the number of literates required for the maintenance of that office in the villages of the nome may well rise as high as 600. If similar numbers are assumed in the case of the *praktoreia*, the *kômogrammateia*, as well as those engaged in other permanent, nome-wide bureaux, special committees, offices of the *stratêgoi*, *basilikoi grammateis*, the various archives, as well in the city administration, the total may even be greater than 3,000, to which should be added those active in the management of the private estates (cf., most recently, KRUSE 2012). Evidence on the number of scribes occupied by different officials is scattered in publications of their archives. Cf., e.g., P.Petaus, p. 22-39. On the importance of writing for the functioning of Roman bureaucracy cf., e.g., KELLY 1994, 164-165.

¹⁹ WOLFF 1978, 114-122; YIFTACH-FIRANKO 2007.

men in the *grapheion* documents. Yet *hypomnēmata* convey different literacy rates. As one might expect, male lessors are overwhelmingly literate, and even among women lessors the literacy rate surpasses what we see in *grapheion* documents.²⁰ In the case of the lessees the picture is reversed, as only one-third wrote out for themselves their own *hypographē*. Among the users of the *grapheion* document, we recall, the rate seems to be 1:2.²¹

I am not convinced that data provided by the *hypomnēmata* are any more representative than those derived from the *grapheion* documents. In the case of *hypomnēmata*, the lessees and the lessors belong, for the most part, to two different socio-economic groups, and this easily accounts for the difference in their rates of literacy: that is, the lessee is a farmer, a member of the rural population in the nome, while the lessor is frequently a land owner, commonly a member of the municipal elite or another privileged population group.²² That being the case, the *hypomnēmata* do not offer a more accurate picture of the general level of literacy than that provided by the *grapheion* document. But taking this dataset into consideration is methodologically important, for it shows that a closer analysis of the social standing of parties to *grapheion* documents is needed before those data can be treated as representative of the nome's population as a whole.²³

²⁰ In *hypomnēmata* of leases during the first three centuries CE, a woman lessor adds the *hypographē* in 19 cases, of which 13 penned their own *hypographē* in person. Only in six instances is a woman said to be illiterate. Among men the rate was 28:1.

²¹ Unique to this group, and symptomatic of the high level of illiteracy among its members, is the writing up of the tenant's scars, moles, and other identifying features. The physical description identifies the person and functions as a substitute for the *hypographē*; the formula εἰκονίσθησαν φάμενοι μὴ εἰδέναι γράμματα, appended to the description only occasionally, is an overt attestation of its function. Cf., e.g., P.Mich. XII 631.18 (185 CE, prov. unknown). Literacy rates similar to those of lessees in the *hypomnēmata* are in evidence in documents relating to δημόσιοι γεωργοί. Cf., e.g., P.Berl.Leihg. 29 (164 CE, Lagis).

²² In P.Mil.Vogl. VI 288 (155 CE, Tebtynis), the lessor, Pasigenēs son of Sabinus alias Nonnus, a *kosmētēs*, perhaps in the city of Ptolemais Euergetis, leases out 13 arouras of land to Παῶπις and Orseus, both sons of Kroniōn and grandchildren of Orsephouphis, residents of Tebtynis: the lessor and his male ancestor bear Greek names, the lessees, native names, some of which, like the Greekish Kroniōn, have equivalents in Egyptian (Pakebkis). While one should resist generalizations, this example from Tebtynis can, I think, be treated as paradigmatic, both with regard to the names of the parties involved, as well as their domicile, and socio-economic status. Cf., cautiously, HERRMANN 1958, 59; ROWLANDSON 1996, 266-272.

²³ Villages in which *grapheia* evolved tended to be bi- or even multicultural, cf., e.g., P.Dime, pp. 114-115. I am unfamiliar with attempts to probe the socio-economic profiles of transacting parties, but it would be useful. Such a study naturally begins with the value of the transactions, as recorded, for example, in the *anagraphē* lists from the *grapheion* in early first-century Tebtynis, published in the second and fifth volume of the Michigan papyri. A survey of some of these lists (P.Mich. II 123-128, V 238-240, 45-49 CE), highlights some 460 entries spelling out the value of the transaction, among which in 259 the value of the transaction exceeds 100 drachmas, 347 in which it exceeds 50, and 385 in which it exceeds 30 drachms. The wealth represented by these three *grapheion* records

The second question relates to the ability of the 25% of the male users of the *grapheion* documents who draft their own *hypographai* to qualify as authors of texts such as the abovementioned reports, that require a more advanced degree of expertise. To answer this question we need to address not only the length of the *hypographê*, but also its quality and legibility, as I did in the case of twenty-two documents whose *hypographai* extend over six lines of text or more. Among these twenty-two *hypographai*, in the case of nine the text is not only long, but also written flawlessly from an orthographic point of view.²⁴ In these cases, the parties also tend to exhibit Greek names and patronyms so that one can assume that they had enjoyed at least some degree of Hellenic *paideia*. Yet seven long *hypographai* do have some mistakes, and five are heavily freighted with error.²⁵ The writers of these texts, who tend to have Egyptian names, were probably exposed to some minimal education, and acquired most of their Greek as a spoken language.²⁶ I do not think that members of this latter group would qualify as skillful scribes and authors of reports, or for that matter, of any other type of sophisticated documentation

seems to give evidence of a local bourgeoisie, rather than of a multi-layered society.

²⁴ Flawless text in the following examples: P.Athen. 14 (22 CE, Philadelphia); P.Corn. 6 (17 CE, Oxyrhyncha); P.Mil.Vogl. II 78 (138/9 CE, Tebtynis); P.Ryl. IV 601 (26 BCE, Ptolemais Euergetis); SB VI 9109 (31 CE, Tebtynis); VIII 9642⁴ (117-137 CE, Tebtynis). Minor mistakes in CPR I 223 (117-137 CE, Ptolemais Euergetis); P.Fam.Tebt. 22 (122 CE, Tebtynis); P.Gen. I 8 (141 CE, Dionysias); P.Mich. X 583 (78 CE, Bacchias); P.Tebt.Tait. 49 (89 CE, Ptolemais Euergetis); PSI VIII 908 (42/3, Tebtynis); SB VIII 9642⁵ (139-161 CE, Tebtynis); XXII 15613 = P.Sel.Warga 7 = P.Tebt. II 529 descr. (111 CE, Tebtynis).

²⁵ Texts written with infelicities and some mistakes: P.Mich. V 263 (35/6 CE, Tebtynis); V 339 (46 CE, Tebtynis); P.Tebt. II 390 = MChr 251 (167 CE, Tebtynis), and to a lesser degree P.Mich. V 254 (29/30 CE, Arsinoîtês) with a copy in no. 255; P.Mich. V 258 (32-4 CE, Arsinoîtês); P.Mich. V 305 (I CE, Arsinoîtês); P.Mich. V 331 (41 CE, Arsinoîtês); P.Mich. V 341 = PSI VIII 904 (46/7 CE, Tebtynis) with a copy in no. 340^v. The text of P.Mich. V 263.24-39 illustrates the type of morphological idiosyncrasies being listed here; many are likely to be caused by the scribe's faulty pronunciation of the Greek: interchange of omikron and omega (e.g., l. 29: χῶμα for χῶμαι. 24: ὠμολωγῶ for ὀμολογῶ), upsilon for omicron (e.g., l. 35: παντυς for παντός), or for οι (e.g., l. 33: ὕκου for οἴκου), interchange of epsilon and αι (e.g., l. 29: χεϊτε for χεῖται; l. 28: αἰάν for ἐάν), the ει and iota (l. 26: εἰεράν for ιεράν; l. 34: βεβεῶσι for βεβαιώσει) λ for ρ: (l. 27: ἡμαλουρίου for ἡμαρουρίου), τ for δ (l. 37: ἡτωτικῶν for ιδιωτικῶν) and δ for τ (ll. 34- 35: ειδιοδικῶν for ιδιωτικῶν). Interchange of cases: nominative for dative (l. 24: Πνευτυνις for Πνεβτύνει), or for genitive: (l. 26: Σεκνεβτυνις for Σεκνεβτύνιος), genitive singular for nominative plural (l. 28: γείτονος for γείτονες), or singular (ll. 28, 30: διωρυκος for διώρυξι); genitive singular for genitive plural (l. 35: χρόνου for χρόνων), dative for accusative (l. 26: Τεβτυνι for Τεβτύνιν), employment of -ιος instead of εως for genitive ending of nouns in -ις (l. 30, 32: Πνευτύνεος for Πνεβτύνεως; l. 38: l. 38 ἐνπιήσεος for ἐμποιήσεως), accusative for dative (l. 28: σφραγετιν for σφραγίδι). For an analysis of the social and cultural implications of idiosyncratic morphology, cf., e.g., BUCKING 2007; KEENAN 1988, 163-164. Note also a caveat by CURCHIN 1995, 467.

²⁶ The said phenomenon is discussed, in a different context, by HOZ 2006.

requiring texts of high quality, such as, to take another outstanding example, petitions.²⁷

But the *hypographai* seem to tell a different story. As indicated at the beginning of this paper, the *hypographê* was first required in double documents in the Ptolemaic period. Yet it was also acknowledged even then that some contracting parties might not be able to write the *hypographê* in person, so they were allowed to have the document composed by another individual, provided that illiteracy was explicitly stated as the reason why another party was introduced into the transaction. The same rule applied to the Roman *grapheia*, where the position of the literate bystander was institutionalized: in the specialized context of the *grapheion* document, the literate bystander was now officially installed; he was called *hypographeus* and was carefully identified alongside the other parties at the end of the contract.²⁸

Another way to alleviate the problem of illiteracy was to redefine literacy itself, so it would apply to as many potential parties to contracts as possible. One way of reaching this goal was to allow parties to compose the *hypographê* in any language they wished: this is in fact the case in the documents from the Judaeian desert during the early second-century CE, where parties compose the *hypographê* in their mother tongue, adding the *hypographê* in Aramaic or Nabatean directly to the Greek body of the document.²⁹ In Egypt, however, the rule was different: the language of the *hypographê* had to be Greek,³⁰ but any type of Greek text would do, regardless of its morphological quality or legibility, and the author of virtually any text, even one barely understandable and riddled with errors, was accepted as someone who knew letters, γράμματα εἰδώς/εἰδυῖα. Thus, with the number of literates stretched to the maximum

²⁷ BAGNALL & CRIBIORE 2006, 42: "... a study of scribal hands according to provenance, destination, and type of document is still a desideratum." A complete list of available petitions is now available in the databank *Synallagma: Greek Contract in Context* (<http://synallagma.tau.ac.il/?project=glrt&user name=guest&password=guest>). Cf. also BUCKING 2007.

²⁸ The earliest safely identifiable document with a *hypographeus* is P.Mich. V 251 (19 CE, Talei). The term was applied in the context of the *grapheion* only. Cf., primarily, YOUTIE 1975b; HANSON 1991, 164; KRAUS 2000, 325-328.

²⁹ Cf., e.g. P.Yadin 17 and COTTON 2003.

³⁰ Cf. primarily, YOUTIE 1975a, 104; 1971a, 162-163; 1971b. The use of the Demotic *hypographê* is attested long after Demotic ceased to be a routine vehicle for documenting contracts, replaced by Greek. Cf., e.g., BGU III 910, col. 1.11 = P.Dime III 31 GH and 2.44 = P.Dime III 31 GD (70 CE, Soknopaiou Nêsos); CPR XVIIIb 13.7-16 l. 16 (217/8 CE, Panopolis); P.Ryl. II 161.22 (81 CE, Soknopaiou Nêsos); P.Vind.Tand. 26. 21 (143 CE, Soknopaiou Nêsos); P.Vind.Worp. 10.18-19 (143/4 CE, Soknopaiou Nêsos ?); SB XVI 12954.16 = P.Ryl. II 329 descr. (116 CE, Arsinoitês); 12957 = P.Lond. II 292 descr. (103-114 CE, Soknopaiou Nêsos). On the expectation that the *hypographê* would be drafted in Greek, cf., in particular, SB I 5117.6 = P.Dime III 29 (55 CE, Soknopaiou Nêsos): διὰ τὸ μὴ εἰδέναι αὐτὸν] γράμματα [Ἑλληνικά, ἀλλὰ Αἰγύπτια γράφει. Cf. also YOUTIE 1975a; HANSON 1991, 164.

and an inclusive definition of literacy squeezed to the minimum, in the society in which an incompetent writer lived he was nonetheless classified among the literates, able to assist others in writing their own *hypographai*. Should the text being written have a different purpose, however, as one to be sent to a high government official capable of redressing some grievances suffered, those with limited experience and skill in writing with reed pen and papyrus were forced to find a flawless writer.

To sum up: *hypographai* to legal documents were meant, in Ptolemaic, Roman and Byzantine Egypt, to be written by the contracting parties themselves. If they were not, this fact would be stated in the text of the *hypographê*. Counting the autographs and allographs among the more than 1300 *hypographai* of legal documents that have come down to us thus accords us a unique means of assessing the level of literacy in Greco-Roman Egypt. The figures I discussed here relate to *hypographai* from *grapheion* documents from the first three centuries CE. An analysis of these figures has shown that the level of literacy of a given party was affected by his gender, place of residence, and the length of the required text. Two figures of interest that were mentioned in the foregoing discussion are that 50% of the male users of the document were able to write some text, and 25% were able to write a longer text.

Both features are significant for the question of the extent of Greek education in the Egyptian *chora*. Especially the latter figure, the one quarter of the users who are able to write long texts, agrees with the abovementioned research focusing on the structure and contents of reports from late Ptolemaic and Roman Egypt. Such a high number of literates could be used as an inexhaustible pool from which potential scribes would be recruited who could serve the local administration by continuously producing these reports. The actual pool, however, was probably considerably smaller. It is questionable whether the data provided by the *grapheion* documents is representative of the population in general, and even if it is, the number of those who could write long Greek texts flawlessly was considerably smaller, amounting to no more than 10% of the male population of the nome. A detailed analysis of the social background and standing, and, in the bureaucratic context, training process of this manpower is now to be desired.

CHARTS

1. LITERACY RATE IN THE EARLY ROMAN GRAPHEION (I-III CE):

	Literate	Illiterate	Total	Literacy Rate
Men	74	138	212	34%
Women	7	97	104	6.7%
Total	81	235	316	25%

2. LITERACY RATE IN THE EARLY ROMAN GRAPHEION (I-III CE), BY LOCATION:

Location	Literate	Illiterate	Total	Literacy Rate
Ptolemais Euergetis	8	11	19	42%
Tebtynis	29	37	66	43%
Soknopaiou Nêsos	1	27	28	3.5%

3. LITERACY RATE IN THE EARLY ROMAN GRAPHEION (I-III CE), BY LENGTH OF THE HYPOGRAPHÊ (MEN ONLY):

Number of lines	Literate	Illiterate	Total	Literacy rate
1 to 3	36	34	70	51%
4 to 6	19	47	66	29%
7 to 9	10	27	37	29%
10 or more	9	30	39	23%
3 or more	38	104	142	27%
Total	74	138	212	35%

4. LITERACY RATE IN THE ARSINOITE LEASE HYPOMNÊMATA (I-III CE):

	Literate	Illiterate	Total	Literacy Rate
Lessees, Men	25	52	77	32%
Lessors, Women	13	6	19	68.5%
Lessors, Men	28	1	29	96%

BIBLIOGRAPHY

- BAGNALL & CRIBIORE 2006
 R.S. BAGNALL, R. CRIBIORE,
*Women's Letters from Ancient
 Egypt, 300 BC-800 AD*, Ann
 Arbor 2006. <http://quod.lib.umich.edu/cgi/t/text/text-idx?c=acls;idno=heb90014>.
- BENAÏSSA 2012
 A. BENAÏSSA, *Rural Settlements
 of the Oxyrhynchite Nome,
 A papyrological survey*,
 Trismegistos Online
 Publications 4, Cologne-Leuven
 2012.
- BOWMAN & WOOLF 1994
 A.K. BOWMAN, G. WOOLF (eds.),
*Literacy and Power in the
 Ancient World*, Cambridge 1994.
- BUCKING 2007
 S. BUCKING, "On the Training
 of Documentary Scribes in
 Roman, Byzantine, and Early
 Islamic Egypt: A Contextualized
 Assessment of the Greek
 Evidence", *ZPE* 159, 2007,
 229-247.
- CALDERINI & DARIS 1935-
 A. CALDERINI, S. DARIS,
*Dizionario dei nomi geografici e
 topografici dell'Egitto greco-
 romano*, Milan 1935-.
- CALDERINI 1950
 R. CALDERINI, "Gli Ἀγραμματοί
 nell'Egitto greco-romano",
Aegyptus 30, 1950, 14-41.
- CLAYTOR 2013
 W.G. CLAYTOR, "A Schedule of
 Contracts and a Private Letter:
P.Fay. 344", *BASP* 50, 2013,
 77-121.
- COLE 1981
 S.G. COLE, "Could Greek
 Women Read and Write?" in:
 H.P. FOLEY (ed.), *Reflections of
 Women in Antiquity*, New York
 1981, 219-245.
- COTTON 2003
 H.M. COTTON, "'Diplomatics'
 or External Aspects of the Legal
 Documents from the Judaean
 Desert: Prolegomena", in:
- C. HEZSER, *Rabbinic Law in
 its Roman and Near Eastern
 Context*, Tübingen 2003, 49-62.
- CRIBIORE 2002
 R. CRIBIORE, "The Women in
 the Apollonios Archive and
 their Use of Literacy", in: H.
 MELAERTS, L. MOOREN (EDS.), *La
 rôle et le statut de la femme en
 Égypte hellénistique, romaine
 et byzantine, Actes du colloque
 international, Bruxelles-Leuven,
 27-29 novembre 1997*, Leuven
 2002, 149-166.
- CURCHIN 1995
 L.A. CURCHIN, "Literacy in the
 Roman Provinces: Qualitative
 and Quantitative Data from
 Central Spain", *AJP* 116, 1995,
 461-476.
- DEPAUW 2003
 M. DEPAUW, "Autograph
 Confirmation in Demotic Private
 Contracts", *CdÉ* 78, 2003,
 66-111.
- HARRIS 1988
 W.V. HARRIS, "L'analfabetismo
 e le funzioni della parola scritta
 nel mondo romano", *Quaderni
 di storia* 14 (27), 1988, 5-26.
- HARRIS 1989
 W.V. HARRIS, *Ancient Literacy*,
 Cambridge 1989.
- HANSON 1991
 A.E. HANSON, "Ancient
 Illiteracy", in: M. BEARD
 et al. (eds.), *Literacy in the
 Roman World*, Ann Arbor 1991,
 159-198.
- HERRMANN 1958
 J. HERRMANN, *Studien zur
 Bodenpacht im Recht der
 graeco-aegyptischen Papyri*,
 (MBRG 41), Munich 1958.
- HOZ 2006
 M.P. DE HOZ, "Literacy in Rural
 Anatolia: the Testimony of the
 Confession Inscriptions", *ZPE*
 155, 2006, 139-144.
- ILAN 2005
 T. ILAN, "Learned Jewish

- Women in Antiquity”, in: H. MERKEL, B. EGO, *Religiöses Lernen in der biblischen, frühjüdischen und frühchristlichen Überlieferung*, Tübingen 2005, 175-190.
- JÖRDENS 2005
A. JÖRDENS, “Griechische Papyri in Soknopaiou Nesos”, in S. LIPPERT, M. SCHENTULEIT (eds.), *Tebtynis und Soknopaiou Nesos. Leben im römerzeitlichen Fajum*, Wiesbaden 2005, 41-56.
- KEENAN 1988
J. KEENAN, “On Languages and Literacy in Byzantine Aphrodito”, in: B. MANDILARAS et al. (eds.), *Proceedings of the XVIII International Congress of Papyrology: Athens, 25-31 May 1986*, Athens 1988, vol. II, 161-167.
- KELLY 1994
C.M. KELLY, “Later Roman Bureaucracy: going through the Files”, in: A.K. BOWMAN, G. WOOLF (eds.), *Literacy and Power in the Ancient World*, Cambridge 1994, 161-176.
- KRAUS 1999
T.J. KRAUS, “‘Slow writers’, βραδέως γράφοντες: What, How Much, and How did They Write?” *Eranos* 97.1-2, 1999, 86-97.
- KRAUS 2000
T.J. KRAUS, “(Il)literacy in Non-Literary Papyri from Graeco-Roman Egypt: Further Aspects of the Educational Ideal in Ancient Literary Sources and Modern Times”, *Mnemosyne* 53, 3, 2000, 322-342.
- KRUSE 2012
T. KRUSE, “Die Bedeutung des administrativen Hilfspersonals in der enchorischen Verwaltung des kaiserzeitlichen Ägyptens für die administrative Kontinuität”, in: P. SCHUBERT (ed.), *Actes du 26^e Congrès international de papyrologie. Genève, 16-21 août 2010* (Recherches et rencontres. Publications de la faculté des lettres de Genève), Geneva 2012, 417-423.
- MAJER-LEONHARD 1913
E. MAJER-LEONHARD, *ΑΓΡΑΜΜΑΤΟΙ: in Aegyptο qui Litteras Sciverint Qui Nesciverint Ex Papyris Graecis Quantum Fieri Potest Exploratur Pars Prima Seorsum Expressa*, Frankfurt 1913 (*non vidi*).
- MANO 2008
S. MANO, “Femmes et ‘lettres’: alphabétisation féminine et professions intellectuelles dans les villes de l’Occident romain sous le Haut-Empire”, *Pallas* 76, 2008, 203-215.
- OERTEL 1917
F. OERTEL, *Die Liturgie. Studien zur ptolemäischen und kaiserlichen Verwaltung Ägyptens*, Leipzig 1917 (repr. 1965).
- RATHBONE 1990
D.W. RATHBONE, “Villages, Land, and Population in Graeco-Roman Egypt”, *Proceedings of the Cambridge Philological Society* 36, 1990, 103-142.
- ROWLANDSON 1996
J. ROWLANDSON, *Landowners and Tenants in Roman Egypt. The Social Relations of Agriculture in the Oxyrhynchite Nome*, Oxford 1996.
- SAMUEL 1981
D. H. SAMUEL, “Greeks and Romans at Soknopaiou Nesos”, in: R.S. BAGNALL et al., *Proceedings of the XVI International Congress of Papyrology*, Chico 1981, 389-403.
- STEINMANN 1971
F. STEINMANN, “Wie groß war die Zahl der schreibkundigen Kopten? Eine Untersuchung auf Grund der Djeme-Urkunden”, *Klio* 53, 1971, 353-360.
- THOMPSON 1994
D. THOMPSON, “Literacy and Power in Ptolemaic Egypt”, in: A.K. BOWMAN & G. WOOLF (eds.), *Literacy and Power in the Ancient World*, Cambridge 1994, 67-83.
- VAN MINNEN 1998
P. VAN MINNEN, “Boorish or Bookish: Literature in Egyptian Villages of the Fayum in the Greco-Roman Period”, *JJP* 28, 1998, 99-184.
- WERNER 2009
S. WERNER, “Literacy Studies in Classics: The Last Twenty Years”, in: W.A. JOHNSON, H.N. PARKER (eds.), *Ancient Literacies: the Culture of Reading in Greece and Rome*, Oxford 2009, 333-382.
- WOLFF 1978
H.J. WOLFF, *Das Recht der griechischen Papyri Ägyptens in der Zeit der Ptolemaeer und des Prinzipats, 2: Organisation und Kontrolle des privaten Rechtsverkehrs*, Munich 1978.
- YIFTACH-FIRANKO 2007
U. YIFTACH-FIRANKO, “The Rise of the *Hypomnēma* as a Lease Contract in the First Century Arsinoites”, in: J. FRÖSEN, T. PUROLA, E. SALMENKIVI (eds.), *Proceedings of the 24th International Congress of Papyrology, Helsinki, 1-7 August 2004*, Helsinki 2007, 1051-1061.
- YIFTACH-FIRANKO 2014a
U. YIFTACH-FIRANKO, “Did *BGU* XIV 2367 Work?” in M. DEPAUW (ed.), *Legal Documents in Ancient Societies III: Identifiers and Identification Methods in the Ancient World, Leuven-Brussels, 23-25 September 2010*, Leuven 2014, 103-118.
- YIFTACH-FIRANKO 2014b
U. YIFTACH-FIRANKO, “Evolution of Forms of Greek Documents of the Ptolemaic, Roman

- and Byzantine Periods”, in J. KEENAN, J. MANNING, U. YIFTACH-FIRANKO (eds.), *Law and Legal Practice in Egypt from Alexander to the Arab Conquest. A Selection of Papyrological Sources in Translation, with Introduction and Commentary*, Cambridge 2014, 35-53.
- YOUTIE 1966
H. C. YOUTIE, “Pétaus, Fils de Pétaus, ou le scribe qui ne savait pas écrire”, *CdÉ* 41, 1966, 127-143.
- YOUTIE 1971a
H. C. YOUTIE, “Ἀγράμματος, an Aspect of Greek Society in Egypt”, *HSCPh* 75, 1971, 161-176.
- YOUTIE 1971b
H. C. YOUTIE, “Βραδέως Γράφων. Between Literacy and Illiteracy”, *GRBS* 12, 1971, 239-261.
- YOUTIE 1975a
H. C. YOUTIE, “Because They Do Not Know Letters”, *ZPE* 19, 1975, 101-108.
- YOUTIE 1975b
H. C. YOUTIE, “Ἵπογραφεύς. The Social Impact of Illiteracy in Graeco-Roman Egypt”, *ZPE* 17, 1975, 201-221.
- YOUTIE 1975c
H. C. YOUTIE, “Hypographeis and Witnesses of 2nd Century Tebtunis”, *ZPE* 19, 1975, 191-201.