

# Coptic Months in Islamic Years. The use of the fiscal year (*al-sana al-ḥarāḡiyya*) in Fatimid Egypt (969-1171 CE) against the background of Arabicisa- tion and Islamisation\*

By

Johannes den Heijer

*Université catholique de Louvain*

The main purpose of this study is to investigate the combination of Coptic months and years that refer to Islam, especially in the so-called fiscal (more precisely: land tax<sup>1</sup>) year (*al-sana al-ḥarāḡiyya*, henceforth referred to as *ḥarāḡ* year), in documentary as well as in narrative sources hailing from Fatimid Egypt. In the last section, the focus will be on Copto-Arabic historiography, which makes extensive use of this system for dating events of the period. Documentary sources will be examined in the first two sections but in a more preliminary manner, without the slightest attempt at exhaustivity<sup>2</sup>.

---

\* In appreciation of Jean-Claude Haelewyck and his long-standing commitment, not only to his own field but to (ancient and pre-modern) Oriental Studies in general, within the framework of the Académie Belge pour l'Étude des Langues Anciennes et Orientales (ABELAO) with its Bulletin (*BABELAO*) and of the Centre d'études orientales – Institut orientaliste de Louvain (CIOL) of the Université catholique de Louvain; and in fond memory of Said Meghawry Mohammed (1956-2020), whose dynamic personality and remarkable efforts to promote Arabic papyrology in Egypt and elsewhere will not be forgotten by his friends and colleagues.

<sup>1</sup> In general on the *ḥarāḡ* or land tax in Egypt, see, e.g., COOPER 1976; CAHEN 1978; CUNO 1992, p. 22-23.

<sup>2</sup> This study, many years overdue, is an updated and expanded version of two hitherto unpublished conference papers: (1) Johannes DEN HEIJER, Said MEGHAWRY MOHAMMED, “The Use of the *ḥarāḡ* calendar in Arabic Documentary and Literary Sources”, presented at *Documentary Evidence and the History of Early Islamic*

## 1. Introduction

### 1.1. Scope and aims of the present study

First of all, in order to allow for a better understanding of the status and functioning of the *ḥarāġ* year in the period under investigation, a few remarks and suggestions will be given about its possible origin and early development (below, section 2). It should be clear from the outset, however, that a general study of the *ḥarāġ* year remains far beyond the scope of this limited study, and it is essential, in this regard, to draw attention to a much more detailed forthcoming study by Johannes Thomann, which not only is more comprehensive in its perusal of documentary sources but also, even more importantly, examines such technical aspects as the conversion of *ḥarāġ* dates into the *hiġra* calendar and, by extension, into the Common Era.<sup>3</sup> Hence, matters of chronography and time computation will be largely avoided in the present study. The approach here will rather be one of cultural history, the history of ideas and the study of group identity: in the following observations, the central underlying research question is to what extent, and how, the choice of dating events to the *ḥarāġ* year rather than – or sometimes in combination with – the corresponding *hiġra* calendar or the more ancient Coptic calendar of the Martyrs can be considered as reflecting the ongoing process of Arabisation and Islamisation of Egyptian society and culture in the Fatimid period (and earlier). More concretely, the following observations can be read as an attempt to understand the choice of dating system in terms of its relation with the ethnic or confessional group identities (mostly Muslim – whether of Arab or local Egyptian origin – or Christian – specially Coptic Christian)<sup>4</sup> of the persons or communities involved in the texts in question. Concurrently, the events or issues contained in these texts will be taken into consideration as well, with an aim of grasping the logic of the links – if any – between specific categories of issues (religious, social, economic, political) and the choice between the available calendars for dating such issues.

### 1.2. The rationale of solar and lunar calendars in early Islamic Egypt

Thus far, and awaiting J. Thomann's forthcoming study, it is fair to state that the phenomenon of the *ḥarāġ* year has not received much systematic scholarly attention. It does not appear in the *Wüstenfeld-Mahler'sche Vergleichungstabellen*<sup>5</sup> and other reference works on

*Egypt*, the founding symposium of the International Association for Arabic Papyrology (ISAP), Cairo, 2002; and (2) Johannes DEN HEIJER, "The Use of the *ḥarāġ* Year in Arabic Documentary and Literary Sources (Part II)", presented at *Documents and the History of the Early Islamic World*, the third ISAP symposium, Alexandria, 23-26 March 2006.

<sup>3</sup> With profound gratitude to Johannes Thomann (Universität Zürich) for generously sharing his ongoing research outcome while preparing his paper "The *kharājī* calendar in documentary and literary sources", presented at *Connecting Distant Worlds*, the seventh ICAHP conference, held online in March 2021 and his more elaborate article based on this paper, to be published shortly in the *Journal of the Economic and Social History of the Orient* (JESHO).

<sup>4</sup> To avoid the risk of simplification implied in such a categorisation, it should be remembered that the ethnic and religious landscape of Fatimid Egypt was considerably more complex and dynamic. See, e.g., DEN HEIJER, LEV, SWANSON 2015.

<sup>5</sup> Cf. WÜSTENFELD, MAHLER 1961, p. 48-84: "Vergleichungstabellen der christlichen Ären des Morgenlandes".

Egyptian or Middle Eastern history.<sup>6</sup> Occasionally the *ḥarāġ* year occurs in more recent studies, but mostly in a rather concise or secondary way<sup>7</sup>.

This scarce and scattered interest in the matter notwithstanding, scholarship on the history of early Islamic Egypt has long recognised that the Arab conquest of Egypt<sup>8</sup> never resulted in a complete replacement of the solar calendar and its Coptic (actually ancient Egyptian) months<sup>9</sup> by the lunar *hiġra* calendar of Islam.<sup>10</sup> Manifestly, in Egyptian society, with its dependency on agriculture and the annual inundation of the Nile, a lunar calendar simply could not work, economically speaking.<sup>11</sup> The early Muslim rulers of Egypt were fully aware of this, and refrained from imposing the lunar *hiġra* calendar as the sole valid system for dating all writings and events recorded therein.<sup>12</sup> On the one hand, the Arabicisation and Islamisation that set in after the conquest were two long and gradual interrelated but separate parallel processes of cultural transformation, in terms of religious beliefs and practices, as well as of language use with a host of related cultural aspects. For centuries, a large proportion of the Egyptian population remained Coptic-speaking, Christian, or both,<sup>13</sup> and continued to use the Coptic calendar of the Martyrs as its main frame of reference, at least for purposes directly related to religious issues.<sup>14</sup> And on the other hand, as we shall see shortly (below, section 2.1), the Muslim authorities' need to reconcile the existing solar organisation of time with a powerful

---

<sup>6</sup> Cf. HUMPHREYS 1992, p. 20: "(...) solar calendars, which varied to some degree according to the ancient practices of particular regions", without mention of the *ḥarāġ* years. The first edition of the *Encyclopaedia of Islam* did mention the *ḥarāġ* year, albeit very briefly, in a lemma on chronography, see DE BOER 1934, p. 1309. In the second edition, it hardly received more attention, cf. DE BLOIS 2000, p. 263.

<sup>7</sup> FRANTZ-MURPHY 1986, p. 40; RABIE 1972, p. 133-134; RABIE 1981, p. 59-90, particularly p. 68 and p. 85: "(...) the kharaji year, which was identical with the Coptic solar year (...)"; RĀĠIB 2007, p. 194; BRUNING 2015, p. 368.

<sup>8</sup> On the Arab conquest in general, see HOYLAND 2015. On the Arab conquest of Egypt specifically, see BOOTH 2013 and BOOTH 2016. On details of social and economic change – and continuity – after the conquest see, e.g., SIJPESTEIJN 2013 and MIKHAIL 2016, as well as, for the larger geographical and chronological context, the output of the Leiden-based project *Embedding Conquest. Naturalising Muslim Rule in the Early Islamic Empire (600-1000)* ([emco.hcommons.org](http://emco.hcommons.org)).

<sup>9</sup> For the Ancient Egyptian calendar and its Coptic continuation, see WISSA WASSEF 1991a, p. 438. The more recent *Wikipedia* articles "Egyptian calendar", "Coptic calendar", and "Era of the Martyrs" provide fairly adequate overviews of the main issues, despite a lack of bibliographical references.

<sup>10</sup> On the latter, see MONTGOMERY WATT 1971, p. 378. The *Wikipedia* article "Islamic calendar" contains reliable and well referenced information.

<sup>11</sup> As explained, e.g., by RĀĠIB 2007, p. 194 with further references.

<sup>12</sup> Obviously, such factors (except for crucial importance of the Nile inundation) also apply to other parts of the conquered territories where older solar calendars continued to be used. Thus, the *ḥarāġ* calendar is by no means an exclusively Egyptian phenomenon. In J. Thomann's forthcoming study, this larger dimension will be duly accounted for, whereas the geographical scope of the present study must remain limited to Egypt.

<sup>13</sup> Although the relation between language shift and religious conversion remains to be investigated systematically, it is a matter of common sense to exclude the idea that, in a Coptic-speaking environment, conversion to Islam (whether individually or collectively, at the village level, for example) would have triggered an overnight language shift to Arabic. Thus, in a sociolinguistic sense, "Muslim Copts" must have existed at some point in time, even if it would be difficult to adduce hard evidence for this. Cf., for a critical definition of the term "Coptic", DU BOURGUET 1983.

<sup>14</sup> As is generally known, the Coptic calendar has survived until the present day: besides its obvious use within the Coptic Orthodox Church and the community attached to it, it has an official status in modern Egypt, as a means to express recognition of the still significant Coptic segment of the population. This can be seen on a daily basis, e.g., in newspapers such as *Al Ahrām*.

Islamic identity marker soon led to the introduction of a *de facto* Islamic solar year for administrative use, with the *hiġra* of the prophet Muḥammad as its starting point for counting the years, but with the ancient Egyptian/Coptic months, including their names and their duration, to indicate the days within these years, which thus remained solidly solar.<sup>15</sup> In this “hybrid system” of lunisolar time computation, the Coptic months were partly extrapolated, as it were, from their Christian liturgical use and continued to be used by the Muslim authorities and by the population at large, irrespective of religious affiliation, as a device for dating non-religious events, primarily but not exclusively linked to the realm of agriculture. In this manner, a practice of thousands of years was continued<sup>16</sup> quite seamlessly despite the significant cesure of a new point of reference manifestly linked to Muslim rule. Moreover, with or without the use of numbered lunisolar years, the persistent use of the Coptic months outside the Christian religious domain was to survive on the long term: it is well attested in medieval Arabic narrative sources<sup>17</sup> and indeed, traces of it can still be found in present-day Egypt.<sup>18</sup>

### 1.3. The *ḥarāġ* year in Fatimid Egypt

Soon after the Fatimid conquest of Egypt in 969 CE, this lunisolar year was fully institutionalized and came to be referred to as the *ḥarāġ* year (*al-sana al-ḥarāġiyya*), although the term had already been used earlier than that as we shall see shortly. In the Fatimid period, the time gap between the solar *ḥarāġ* year and the lunar *hiġra* year gradually increased up to three or four years. Before the Fatimid age, however, this difference usually had been less significant, because of the regular application of a procedure called *izdilāq*, which implied that every 32 years, the administrators would simply skip an entire solar year.<sup>19</sup>

As pointed out above, the focus of this study is on the Fatimid period itself (sections 3 and 4), but this general introduction will be nevertheless followed by a brief discussion (section 2) on the complexities and uncertainties surrounding the origins and the early development of the Islamic lunisolar calendar in Egypt. This section, while necessarily incomplete and limited

---

<sup>15</sup> Furthermore, in documents from early Islamic Egypt, the Roman system of indictions could be combined with what has generally been taken to be *hiġra* years, see GROHMANN 1966, p. 15. Cf., e.g., CASSON 1938, p. 274-291; WORP 1985 (with gratitude to Klaas Worp for these last two references and for his feedback on the conferences papers mentioned above, note 1); KRAEMER 1958, p. 180-195; HIRSCHFELD, SOLAR 1981, p. 203-204; the last two references cited by SHADDEL 2018, p. 297-298; TILLIER, VANTHIEGEM 2019, p. 159, p. 163.

<sup>16</sup> For other examples of such continuity in Egyptian and Middle Eastern society, mostly with regard to material culture, see, e.g., WENDRICH, VAN DER KOOY 2002, and, concerning early Islamic and Fatimid Egypt specifically, HALM 2003, p. 40-44; RĀĠIB 2007, p. 193, after BONNEAU 1964, p. 114-115, p. 202.

<sup>17</sup> See below, section 3.2.

<sup>18</sup> The best proof of the continued use of the Coptic months over the centuries, even after the disappearance of the *ḥarāġ* calendar (see below, section 2) is the commonly known fact that today, the Coptic months are still used by Egyptians, regardless of confessional identity, when referring to agriculture. Additionally, their names occur in expressions about the climatological characteristics of the respective months, such as *bāba ḥuṣṣ wi-ʿfil il-bawwāba* “Bāba, come in and close the door (against the cold)”; *tūba tsayyar iṣ-ṣabiyya karkūba* “Tuba (January/February) [is so cold that it] turns a young girl into a hag”; *hatūr abu d-dahab il-mantūr* “Hatur (the month of) scattered gold (alluding to the sowing of wheat)”, see BADAWI, HINDS 1986, p. 49, p. 549 and p. 900, respectively. Other examples on p. 36, 549, and p. 772. A complete and partly different list of such proverbs for all Coptic months, can be found in WISSA WASSEF 1991b.

<sup>19</sup> Unfortunately, when explaining this, Grohmann failed to specify a particular historical or geographical context for this observation: he simply wrote that this was done “In der Finanzverwaltung”. GROHMANN 1966, p. 13 (with in note 3, a highly relevant reference to BECKER 1910, p. 98). For the *izdilāq* procedure, see AL-MAQRĪZĪ, al-Ḥiṭat, 1, p. 740.

in its scope, will include a few references to documents containing relevant dates, either without or with explicit mention of the *ḥarāğ* year.

## 2. *The ḥarāğ year and its antecedents before the Fatimid period*

### 2.1. *The question of an early Islamic lunisolar calendar*

The question of the origin of an Islamic lunisolar calendar has sparked a lively and interesting scholarly debate in recent years. In an article published in 2007, Yūsuf Rāğib edited, translated and analysed two early Arabic papyri containing debt acknowledgements and using the hitherto unknown expression *sanat qaḏā' al-mu'minīn*.<sup>20</sup> After a richly documented survey of various kinds of references to the Islamic era in Arabic, Greek and Syriac, Rāğib not only pointed out that the term *hiğra* had not yet made its appearance in this context in this period,<sup>21</sup> but especially interpreted *sanat qaḏā' al-mu'minīn* as “year of the jurisdiction of the Muslims”, contending, without the slightest hesitation, that the expression refers to a lunar era with solar months, in other words, a lunisolar year, that linked Muslim chronology to the Coptic calendar.<sup>22</sup>

Next, in 2015, Jelle Bruning published an article that included the edition and translation of one further early Arabic papyrus of similar content, with an extensive commentary in which he fundamentally took issue with Rāğib's interpretation. Instead of *sanat qaḏā' al-mu'minīn*, according to Bruning, the correct reading of the expression would be *sunnat<sup>a</sup> qaḏā' al-mu'minīn*, “in accordance with the normative procedure of the believers”. Thus, it would have had nothing to do with an era of time but rather pertained to legal practice.<sup>23</sup>

It should be duly stressed here that Bruning's arguments are based on extensive research on various aspects (paleography, grammar, lexicography, formulary, intertextuality, etc.) of an impressive variety of relevant kinds of sources, not only in Arabic but also in Ancient South Arabian, Greek, and Coptic. While certainly appreciating this degree of erudition and actually agreeing with some of his arguments, Mehdy Shaddel, on his turn, nevertheless deconstructed Bruning's central thesis in another thoroughly researched article, published in 2018. This latter study critically revisits the same papyri commented upon by Rāğib and by Bruning, respectively.

After a thorough analysis of the semantic and grammatical aspects, in the examples aduced by Bruning, of the terms *sunna* and *qaḏā'* as well of their combination in the genitive construction *sunnat<sup>a</sup> qaḏā'*, Shaddel's rejects the vocalisation *sunnat<sup>a</sup>* and concludes that the expression should indeed be read as *sanat qaḏā' al-mu'minīn* and to be taken as a reference to

<sup>20</sup> P. Louvre inv. J. David-Weill 20 (dated to 42/662-663), edited, translated and commented in RĀĞIB 2007, p. 195-201; and P. Vindob. A 1119 (57/676-677), RĀĞIB 2007, p. 201-204. In the Arabic Papyrology Database (<https://www.apd.gwi.uni-muenchen.de/apd/project.jsp>, henceforth APD), the former papyrus is now listed as P.RagibJurisdiction 1 and the latter as P.RagibJurisdiction 1 = P.TillierDebts.

<sup>21</sup> RĀĞIB 2007, p. 187-192.

<sup>22</sup> “La fin de l'année de la juridiction des croyants *devait indubitablement correspondre* à celle de l'année copte (...). L'ère de la juridiction des croyants *était donc une ère lunaire à mois solaires* qui associait la chronologie musulmane au calendrier copte”, RĀĞIB 2007, p. 193 (italics for emphasis added, JdH). Rāğib used the term “ères lunisolaires” in the larger geographical context of the former Byzantine and Sassanid territories conquered by the Arabs, RĀĞIB 2007, p. 194.

<sup>23</sup> BRUNING 2015. The discussion on the expression is on p. 366-367.

an era of time, after all.<sup>24</sup> More precisely, according to Shaddel, *qaḍā'* must have pertained to a system for keeping track of the passage of time, so that a convenient translation of *sanat qaḍā' al-mu'minīn* would be “the year according to the reckoning of the believers”, an interpretation based on a detailed examination of a variety of texts including several Qur'ānic verses and Arabic papyri.<sup>25</sup>

This return to a chronological understanding of the expression in question by no means implies rehabilitation of Rāḡib's interpretation, however. Basing himself on a substantial investigation of various theories about the origins of the Islamic calendar, as well as on a close reading of contemporary references to it in non-Muslim (mostly Syriac) sources, Shaddel comes to the conclusion that its original starting point was the official foundation of the first Islamic polity (*umma*) in Medina by the prophet Muḥammad and that later, probably in the Marwānid period of the Umayyad caliphate (after 684 CE), this starting point was reinterpreted as being the actual migration (*hiḡra*) of the prophet and hence came to be known as the beginning of the *hiḡrī* calendar.<sup>26</sup> At the end of this remarkably persuasive dissertation, Shaddel vigorously emphasises that all of this necessarily applies to the *lunar* calendar and categorically dismisses Rāḡib's “ill-founded claim about the continued use of the pre-Islamic lunisolar calendar by the Arabian conquerors up until at least the year 57 AH in his edition of P. Louvre inv. J. David-Weill 20.”<sup>27</sup>

The most recent inquiry into this matter is the one published by Mathieu Tillier and Naïm Vanthiegem who added several more papyri to the corpus of documents containing either the expression *sanat qaḍā' al-mu'minīn* or its more concise version *sana*<sup>28</sup> and thus were able to investigate its possible meaning in even more detail than their predecessors could. Tillier and Vanthiegem's study first deals in great detail with the function and environment of the documents in question, with a focus on debt registers, receipts and the recording procedures involved,<sup>29</sup> before offering a detailed assessment of Rāḡib's, Bruning's and Shaddel's hypotheses<sup>30</sup> followed by their own alternative theory.

The two authors sustain and further elaborate Shaddel's rejection of Bruning's reading *sunna* instead of *sana* with its implications,<sup>31</sup> and thus agree that the expression indeed must have stood for a calendar. In their quest for a deeper understanding of the *sanat qaḍā' al-mu'minīn*, one central issue is the interpretation of the word *qaḍā'*, which can no longer be taken as referring to jurisdiction or judicature, particularly for reasons of chronology. Instead of this, and instead of Shaddel's interpretation summarised above, the authors prefer to understand *qaḍā'* as the “power/fulfilment/decreed of the Muslims” in the sense of authority which corresponds to “the fulfilment of a divine design by the believers, which includes, in particular, the enforcement of Divine Law” with Qur'ānic connotations. The numerous arguments

---

<sup>24</sup> SHADDEL 2018, p. 293-296.

<sup>25</sup> SHADDEL 2018, p. 296-297, p. 298-299, with (p. 299 and note 36) a reference to Fred Donner's suggested translation “era of the believers”, cf. DONNER 2010, p. 177.

<sup>26</sup> SHADDEL 2018, p. 301-307.

<sup>27</sup> SHADDEL 2018, p. 307-308.

<sup>28</sup> A total of twelve documents is broken down into three categories, the second of which includes six unedited fragments. TILLIER, VANTHIEGEM 2019, p. 148-149.

<sup>29</sup> TILLIER, VANTHIEGEM 2019, p. 149-154.

<sup>30</sup> TILLIER, VANTHIEGEM 2019, p. 154-157.

<sup>31</sup> TILLIER, VANTHIEGEM 2019, p. 155-156.

produced for this interpretation are impressively solid, based as they are on extensive research on the origins and early development of the administration of justice and the office of judge (*qādī*).<sup>32</sup>

Tillier and Vanthiegem thus succeed in defining the *sanat qaḏā' al-mu'minīn*, now convincingly understood as “year of the decree of the believers”, as referring to an early version of what would later become the *hiğra* year. Moreover, they hypothesise that it was most probably an official, unified and transregional imperial calendar rather than a local Egyptian one. When it comes to identifying the starting point of this calendar, the authors disagree with Shaddel’s theory that the starting point for this calendar was the foundation of a new community and a new polity, in Medina. Perusing, once again, an impressive variety of sources and studies, they argue that the point of reference for this calendar may well have been the establishment of the prophet Muḥammad’s sovereignty following the treaty of al-Ḥudaybiyya, which would actually have occurred in 622 CE but would later have been postdated to 628 CE so as to make the Islamic calendar start with the migration (*hiğra*) of the prophet to Medina.<sup>33</sup>

From the perspective of the present study, however, the most crucial side of the matter is of course Rāğib’s interpretation of *sanat qaḏā' al-mu'minīn* as the name given to a lunisolar calendar. In this regard, a key expression in the documents is “the end (*mil'*) of the year forty-two” in P. Louvre Inv. J. David-Weill 20. On this topic, Tillier and Vanthiegem agree with Bruning’s objection, seconded by Shaddel, against Rāğib’s inconsistency in translating the word *mil'* first as “end (of the year)” and the second time as “full flooding (of the basins)”. Comparing with other documents that contain similar wordings, they come to interpret the phrase in question, with Bruning, as “until the basins are full, until the high waters of the year forty-two.” While this point in time, the high point of the flooding of Nile, indeed marks the end of the Coptic year, the authors demonstrate that there is no evidence to suggest that it actually coincided with the end of the *sanat qaḏā' al-mu'minīn* in the year 42. Hence, Rāğib’s idea of a lunisolar year with Coptic months further collapses, according to Tillier and Vanthiegem, in line with Shaddel’s abovementioned rejection of the same idea.<sup>34</sup>

Lack of evidence and weakness of arguments, however, do not necessarily mean that something is outright impossible. For the time being, it might be preferable to conclude that the matter remains undecided and that Rāğib’s idea can still survive as a mere possibility even though his main argument was convincingly proven incorrect. Moreover, other evidence adduced against it may not be as solid as it appears at first sight. While Shaddel’s comparison with a number of bilingual Nessana papyri from 54 a and 57 AH, which combine the indiction system with the months of the *hiğra* years, importantly proves that the lunar Muslim calendar already functioned at that time,<sup>35</sup> this by no means rules out, theoretically at least, the existence in Egypt (or elsewhere for that matter) of a parallel system with some kind of official status in the Muslim-dominated administration and clearly recognisable as such by means of a starting point that refers to a key moment in Islamic history. Tillier and Vanthiegem also refer to a Nessana papyrus that uses the dating system and thus “suggests that the calendar in ques-

---

<sup>32</sup> TILLIER, VANTHIEGEM 2019, p. 156-160. In this context, it is definitely worth mentioning that Mathieu Tillier has recently produced a monumental, richly documented and well acclaimed volume on this complex subject with its manifold ramifications, see TILLIER 2017 and the reviews MELCHERT 2018, RHEROUSSE 2019, and DEN HEIJER 2020.

<sup>33</sup> TILLIER, VANTHIEGEM 2019, p. 160-168, 179-181.

<sup>34</sup> BRUNING 2015, p. 365; TILLIER, VANTHIEGEM 2019, p. 154.

<sup>35</sup> SHADDEL 2018, p. 307-308. Shaddel also makes this point, and brilliantly at that, on p. 302-303.

tion was not uniquely Egyptian”.<sup>36</sup> Again, as important as this observation undoubtedly is, it remains unclear how or why it would essentially preclude the coexistence of a purely lunar and a hybrid lunisolar Muslim calendar in the first century AH.

Since the later narrative Arabic sources to be discussed below, for all their detail, are not particularly informative about these early developments, the matter appears to be rather undecided. While the studies presented here have provided conclusive indications of the early introduction of the lunar calendar soon after the Arab conquest of Egypt (and other regions, for that matter), it nevertheless seems possible that the old Egyptian solar calendar with its Coptic months was “Islamicised” soon after the Arab conquest by way of granting it a new starting point, and that it came to coexist with the lunar calendar hailing from Arabia, even if the latter could also be used in combination with the older system of indictions, or indeed, with Coptic months as we will see below.

## 2.2. Dates and identities in documents from the third/ninth century until the Fatimid conquest

Whether the expression *sanat qaḍā’ al-mu’minīn* is to be taken as referring to an Islamic solar (lunisolar) year or, to the contrary, to the lunar year later known as the year of the *hiġra* thus seems to remain an open question at the present stage. The first of these two possibilities would imply that it was an early manifestation of what later came to be called the fiscal year, as Rāġib seems to suggest,<sup>37</sup> but further speculation about the issue would be uncalled for within the framework of the present study.

Whatever the case may be, these rather uncertain cases from the first century of the *hiġra* seem to be followed by a long gap in published documents, as no potential examples of a lunisolar calendar are known for the entire second/eighth century. From the third/ninth century onwards, however, a rather substantial number of texts mention a Coptic month in combination with a year that manifestly has its starting point in 622 CE. In publications (including the Arabic Papyrology Database), such documents are usually dated to the *hiġra* year in question without further discussion. Here are a few selected examples of such “hybrid dates”, with indication of the subject matter, the geographical provenance when known, and the proper names mentioned in the documents.<sup>38</sup>

1. Order for delivery of bread; Muḥammad b. al-Ḥakam: 4 Tūt 205.<sup>39</sup>
2. Agreement on the exchange of food items; Quṣṭanṭīn al-Farrāš, Fīf b. Mīnā: 23 Abīfa<sup>40</sup> 208.<sup>41</sup>

<sup>36</sup> TILLIER, VANTHIEGEM 2019, p. 154.

<sup>37</sup> “Abandonnée à une date inconnue pour les documents du quotidien et de la pratique, cette ère continua d’être usitée pour la perception des impôts liés au cycle agricole sous un nom différent: « année de l’impôt foncier » (*al-sana al-ḥarāġiyya*) pour la distinguer de l’année lunaire (*al-sana al-hilāliyya*) qui pouvait la devancer de trois ans”, RĀĠIB 2007, p. 194.

<sup>38</sup> All examples hail from Egypt. The APD lists as “unknown Egypt” all documents that lack a more precise indication of provenance. In these and all other examples, only the dates mentioned in the document will be given here, without conversion into Julian dates except where directly relevant for this investigation.

<sup>39</sup> P. World p. 142 b = PERF 697 (P. Vind. inv. A. P. 433); GROHMANN 1952, p. 142-143. The numbers are written in Greek letters (δ and σε, respectively).

<sup>40</sup> For the Arabicised form Abīfa instead of the more common Abīb, see the comments below in this section.



3. Beginning of activities agreed upon in a contract of employment in the agricultural sector; Sa'īd b. 'Īsā, Hārūn b. Bifām: 1 Kiyahk 227.<sup>42</sup>
4. Lease of land on an estate belonging to the Caliph's mother; Ihnās; Bašīr b. Riyāḥ, Sa'īd Ibn 'Abd Allāh: 13 Hatūr 238.<sup>43</sup>
5. Acknowledgement of a debt (*dīkr ḥaqq*) with mention of the dates on which payment is due; al-Fayyūm; al-Laiṭ b. 'Umar, Luqās b. Mīnā, Biṭāna b. Lisimaḥa, and a high ranking *amīr* called al-Faṭḥ who carries the title of *mawlā amīr al-mu'minīn* "Client of the Commander of the Faithful": 1 Aṭīr, 1 Amšīr, 1 Baḥūn 242.<sup>44</sup>
6. Starting date for the lease of a house (Ušmūn,<sup>45</sup> next to the church "of the Apostle";<sup>46</sup> a baker called Sisinna b. Basinna and his daughter Arsahiyūh, a guard (*ḥāris*) called Bamūn, two owners of neighbouring properties, named Bihiyūh and Mirqūrus, respectively: Tūt 267.<sup>47</sup>
7. Account of the supply of clover (*barsīm*); no names: Tuesday 24 till Saturday 28 Bāba, Tuesday 1 and Wednesday 2 Hatūr (no year, 9<sup>th</sup> c. CE).<sup>48</sup>
8. Receipt for payment of poll-tax (*ḡizya*); Ḥiḍr b. Šabīb b. 'Abd al-Masīḥ, Marqūra b. Šanūda the paymaster (*al-ḡahbaḍ*): Tuesday, 13 Barmūda 318.<sup>49</sup>
9. Request to issue a bill for received land-tax (*ḥarāḡ*); 'Īsā b. al-Ḥasan al-Labbān, Abū Ḡamīl Marqūra b. Mīnā the paymaster (*al-ḡahbaḍ*), Ḡuraiḡ b. Qūrīl (scribe): 15 Ṭūba 346.<sup>50</sup>

From the perspective of the present study, it would be tempting indeed to straightforwardly interpret such dates as referring to an Islamicised solar year rather than to the strictly lunar *hiḡra* year. Matters get slightly more complicated, however, when we consider some other dates containing Coptic as well as Islamic months, as is the case, for example, in the following items:

10. Acknowledgement of a debt (*dīkr ḥaqq*); Ibrāhīm b. al-Ḥāriṭ, Ḥamdūn b. Maymūn, Sālīm b. 'Umar, 'Antar b. R-f-[?], Muḥammed b. F[?], 'Abd al-Salām b. Yaḥyā, 'Imrān b. 'Abd Allāh, Ibrāhīm b. 'Abd Al[lāh]: 30 Hatūr 244/Ḡumādā II 244).<sup>51</sup>

<sup>41</sup> P.GrohmannWirtsch. 9 = P.World p. 142 a = P.Alqab 35 (PERF 710); GROHMANN 1966, p. 26, with the statement that such cases "kommen in der Papyri sehr häufig vor". Also with numbers in Greek letters (κγ and ση).

<sup>42</sup> P.Cair.Arab. 96 = P.World, p. 208 = Chrest.Khoury I 61 (P.Cair.EgLib. inv. 174 recto/P.Cair.Arab. 96). Khoury's reading of the second name is "Hārūn b. Bqām".

<sup>43</sup> Chrest.Khoury II 27 = CPR XXI 9 = PERF 759 (P.Vind.inv. A.P. 8632 verso).

<sup>44</sup> Chrest.Khoury II 9 = PERF 764/ P.Vind.inv. A.P. 762 recto. For the Arabic names of these Coptic months, see the comments below.

<sup>45</sup> Used in the singular, this version of the place name (which actually covers only part of the town in question) remains closer to the Coptic name than the more common dual al-Ušmūnayn under which the document is listed in the ADP. Cf. TIMM 1984, p. 209-210.

<sup>46</sup> Rather than a translation, *babuṣṭulus* "the Apostle" is a close transliteration of the Coptic, including the definite article *p-*, which strongly points at a situation in which Coptic names were still more common than their Arabic counterparts.

<sup>47</sup> Chrest.Khoury II 38 (P.Vind.inv. A.P. 1841 recto); GROHMANN 1966, p. 29.

<sup>48</sup> P.Cair.Arab. 369 (P.Cair.EgLib.inv. 323 recto).

<sup>49</sup> P.Cair.Arab. 195 (P.Cair.EgLib.inv. Ta' rīḥ 1741 ḥ verso).

<sup>50</sup> P.Cair.Arab. 199 = P.Alqab 78 (P.Cair.EgLib.inv. 176 recto). The date is written, conventionally, as "the middle (*niṣf*) of Ṭūba".

<sup>51</sup> P.YounesAcknowledgment (P.Vind.inv. A.P. 980 recto and verso); GROHMANN 1966, p. 22.

11. Contract of employment; Ušmūn; Muḥammad b. ‘Abd Allāh b. Muḥammad, ‘Abd al-Mağīd surnamed Abū al-Qāsim b. ‘Abd al-Raḥmān al-Raffā: 1 Barmūda 253/Rabī‘ I).<sup>52</sup>
12. Declaration of divorce; Ušmūn; Muḥammad b. Sahl b. ‘Abd Allāh b. ‘Amr, [?] b. [?], [?] bt. [?], Ḥamd[ān ?]: Rabī‘ II 257/Baramhāt 257.<sup>53</sup>
13. Lease of part of a house; Ušmūn; [?] b. [?], Būla b. [?], Abū Ḍarr Aḥmad b. ‘Alī: Tūt 299 till 30 Misrā 300/Dū al-Ḥiġġā 298.<sup>54</sup>
14. Debt acknowledgement; Ušmūn; Tūsāqa (?) bt. Babuštulus the tailor (*al-ḥayyāt*), Abū al-Ḥudayd al-Aṣfar an-Nūbī b. Abī al-Aswad the tailor from Fustat (*al-ḥayyāt al-Fuṣṭātī*), as well as three witnesses, ‘Abd Allāh b. Muḥammad b. ‘Abd al-‘Azīz, Ib-rāhīm b. Ḥamd b. Aḥmad b. Raġā’, and [?] b. Muḥammad b. Bišr al-Bašrī: 30 Bašans 331, Barmūda/Ša‘bān 331.<sup>55</sup>

We are definitely on firmer ground in pre-Fatimid documents with explicit mention of a *ḥarāġ* year, such as the following:

15. Receipt for guarantee of *ḥarāġ*; Tuṭūn; ‘Abd Allāh b. Ġubayr, [?], [?], Tiyudur b. Andūna the paymaster (*al-ġahbad*): 259 or 289 *ḥarāġiyya*.<sup>56</sup>
16. Receipt for fulfillment of *ḥarāġ* by a guarantor; Tuṭūn; ‘Abd Allāh b. Ġubayr, [?] b. Bifām (?), Tiyudur b. Andūna the paymaster (*al-ġahbad*): 289 *ḥarāġiyya*.<sup>57</sup>
17. Receipt for payment of *ḥarāġ*; Zurayq the herald (*al-munādī*), ‘Abd al-Masīḥ (scribe): Ba’ūna 344 *al-ḥarāġiyya*.<sup>58</sup>
18. Certificate of registration of land for cultivation; Abū ‘Abd Allāh Muḥammad b. Yazīd al-‘Askarī, Yaḥyā, Ya‘qūb b. ‘Abd Allāh (scribe): 347 *ḥarāġiyya*/Raġab 348 AH.<sup>59</sup>

Whereas these last four examples are all related to land tax, the same does not necessarily apply to the ones without mention of the *ḥarāġ* year. Land and agriculture are involved in several of these (Nos. 9, 15, 16, 17, and 18), as well as in one of the two documents about employment (No. 3), but this is less evident in the other one (No. 11). Further topics are food items (Nos. 1 and 2), lease of property (Nos. 4, 6, and 13), divorce (No. 12), payment of poll-tax (*ġizya*) (No. 8), and acknowledgement of debt (Nos. 5, 10, and 14). On the one hand, this could point at a functional distinction between documents with and without mention of the *ḥarāġ* year, and hence, it could be used against interpreting the latter category as implicitly

<sup>52</sup> P.Cair.EgLib.inv. 1485 recto, unpublished. With much gratitude to Asmahan Abu al Assaad (Cairo) for sharing her transcript and translation of this document, which she presented at the seventh ISAP conference (see above, note 2).

<sup>53</sup> P.Philad.Arab. 28 (P.Philad.Univ.Mus.inv. E 16418); AL-MUDARRIS 2008, 44.

<sup>54</sup> P.VanthieghemLocation 1 (P.Bru.x.inv. E. 8449 recto).

<sup>55</sup> P.ThungWrittenObligations 4 = CPR XXVI 23 = PERF 962 (P.Vind.inv. A.Ch. 3577 recto); see also THUNG 2006.

<sup>56</sup> CPR XXI 61 (P.Chic.inv. 13984 verso); emendations: DIEM 2006, p. 87-88. Frantz-Murphy dated this document to 259 AH/873 CE; the reading 289 AH/901-902 CE is Diem’s. The term *al-ġahbad* (emendation by Diem; the edition has *al-ġahbād*) is translated as “the cashier” in the edition and in the APD. Here, “the paymaster” is preferred merely for the sake of uniformity (see Nos. 8 and 9).

<sup>57</sup> CPR XXI 73 (P.Chic.inv. 13985 verso); emendations: DIEM 2006, p. 97-98 (with readings based on his emendations of P.Chic.inv. 13984 verso, *supra* No. 15).

<sup>58</sup> P.Steuerquittungen 18 (P.Heid.inv. Arab. 865 recto).

<sup>59</sup> P.Cair.Arab. 85 = Chrest.Khoury I 71 (P.Cair.EgLib. inv. 177 recto); GROHMANN 1934-1962, p. 85; GROHMANN 1966, p. 30.

referring to that Islamicised solar calendar. On the other hand, the documentation examined here is incomplete and further study would be required.

A more complete and refined analysis could also help us understand these documents, with their dating systems, from the main perspective of these preliminary observations, which is the Arabicisation and Islamisation of Egypt. For the time being, a brief glance at the proper names that occur in the documents suggests that the combination of Coptic months and Islamic years, whether *ḥarāġ* years or *hiġra* years, or both, was common practice among Copts and Arabs, among Christians and Muslims.

Two examples (Nos. 2 and 6) contain only Greek and Coptic names and seem to hail from an exclusively Coptic Christian environment (although the received idea that recent converts to Islam would never keep their original non-Arabic names should not be taken for granted). The same goes for one text (No. 8) with a Graeco-Coptic name and another one that is entirely Arabic but clearly reveals a Christian identity (if the name ‘Abd al-Masīḥ has been deciphered correctly, that is). In this document, the former individual, Ḥiḍr b. Šabīb b. ‘Abd al-Masīḥ, is the taxpayer and the latter, Marqūra b. Šanūda is reported to have written down the receipt.

Other examples appear to involve both Christians and Muslims (Nos. 5, 9, 13, 14, 15, 16), although it seems impossible to determine whether the latter are of Arab origin or rather, native Egyptian converts or descendants of those. In this group of samples, all presumably Christian individuals have Greek or Coptic names, but in one relatively late case, we can see an element of ongoing Arabicisation in the added patronym, in Abū Ġamīl Marqūra b. Mīnā, No. 9, dated to 346 (957-958 CE). In some cases, all names are Arabic but do include names that are either unmistakably Christian (the scribe ‘Abd al-Masīḥ, No. 17) or ambiguous, possibly hinting at recent conversion, and occurring in older samples, such as Sa‘īd Ibn ‘Abd Allāh, No. 4, from 238 (852-853 CE) and Ibrāhīm b. ‘Abd Allāh, No. 10, dated to 244 (858-859 CE).

Finally, and significantly, the use of Coptic months is attested also in documents where all names are Arabic and manifestly Islamic (Nos. 1, 11, 12) as is the use of the *ḥarāġ* year (No. 18, with mention of the Islamic month, on which see below). Therefore, the relative large proportion of Coptic and probably Christian individuals appearing in the documents should be understood as simply reflecting the demographic situation in Egypt in the first centuries following the Arab conquest, without any particular exclusive link between the Coptic segment of the population and the use of the Coptic months for the purpose of marking time.

Still within the framework of Arabicisation, it is relevant to briefly examine the Arabic forms of these Coptic months from the viewpoint of historical linguistics. In the chronological order of the Coptic calendar, these are: Tūt, Bāba, Hatūr (or Hātūr), Kiyahk, Ṭūba, Amšīr, Baramhāt, Barmūda (or Baramūda), Bašans, Ba’ūna, Abīb, Misrā, and Nasī’.<sup>60</sup> As for those names ending in *-a*, however, such transcriptions correspond to the present-day (nationally prestigious) Cairene variety of Egyptian colloquial Arabic, but there is abundant evidence to show that their ending was actually pronounced *-e(h)* or *-i(h)* virtually everywhere in Egypt, as were the similar endings of many other (genuine Arabic as well as Arabicised Greek and Coptic) names and words, since the very beginning of Arabicisation until well into the nineteenth century (and still today, in many parts of the country). Thus, reconstructable linguistic reality must have included Bābe(h), Ṭūbe(h), Barmūde(h), Ba’ūne(h), which are considerably

<sup>60</sup> WISSA WASSEF 1991a, p. 438-439; KOSACK 2012.

closer to the corresponding Coptic source forms (Paope/Paopi, Tobe/Tobi, Parmuti/Pharmuthi, Paone/Paoni, respectively).<sup>61</sup>

Besides these well-known forms, however, some of the earlier documents contain different names of certain Coptic months, which is probably due to a situation in which standardisation of these names had not yet been fully implemented. Thus, we find Hathor/Athor and Pashons Arabicised as Aḫīr and Baḫūn rather than as Hatūr and Bašans, respectively (example No. 5), and Epēp/Epip as Abīfa instead of Abīb (No. 2).

Some of the documents display a certain awareness of the Egyptian character of these months. It is true that one early document (No. 3, from 227, 841-842 CE) qualifies Kiyahk rather vaguely as one “of the months of the non-Arabs (*al-‘Aḡam*)”, which might suggest a mere notion of otherness from an ethnic Arab point of view,<sup>62</sup> but other cases are clearly more specific. Thus, the duration of the lease mentioned above (No. 6) is “a whole year, twelve months, the first of which is Tūt, from the numbering of the Copts (*min ‘adad al-Qibṭ*), of the year two hundred sixty-seven”. A similar expression occurs in one of the documents that contain both Coptic and Islamic months (No. 14): the first Coptic date is the one on which monthly payments are supposed to begin: “the last day (*salḥ*) of the month known as Bašans, of the months of the Copts (*min šuhūr al-Qibṭ*) of the year three hundred and thirty-one.” The month (without indication of the day) in which the document itself was drawn up is referred to as “Barmūda, and it is part of (*wa-huwa min*) Ša‘bān of the the year three hundred and thirty-one”, probably to account for the partial overlap between the two.

In other documents as well, the functional distribution of Coptic and Islamic months calls for further scrutiny. In another acknowledgement of a debt (No. 10), the “last [day] of Hatūr” concerns the payment, whereas one of the testimonies was written in Ġumādā II (without specific day). In one of the contracts of employment, the “first day of Barmūda of the year three and fi[fty and two hundred]” marks the beginning of the one-year employment of said ‘Abd al-Maḡīd, and “the month of Rabī‘ I” (again, without day, and manifestly in the same year) is when the contract was ratified. In the divorce document (No. 12), Rabī‘ I (once again, without day) 257 is the month in which the husband officially declared the divorce before Muḥammad b. Sahl, who wrote his testimony, possibly on the same day (?), on an unspecified “Friday of Baramhāt of the year 257”. Finally, the duration of a lease of property (No. 13) is expressed in Coptic months: “one full year, [being] twelve consecutive months, the first of which is Tūt of the year two hundred ninety-nine and the end, the last day (*salḥ*) of Misrā (...);” this last month, however, is linked to the following *hiḡra* year by the formula “which falls (*al-ḡārī*) in the New Moons of (*ahillat*) of the year three-hundred.” It is the document as such that is dated to Dū al-Ḥiḡḡā of the year preceding the lease.

To come back to the significant expression “of the months of the Copts”, it is relevant at this point to briefly draw attention to its use in narrative sources of roughly the same period,

---

<sup>61</sup> These Coptic forms are given here in their Sahidic and Bohairic versions, respectively. For the observation that for centuries and until quite recently, the ending *-e(h)* or *-i(h)* must have been the prevalent norm in Egypt (as it still is in the Levant) for pronouncing the ending written ٰ or ٰ (tā’ *marbūta*) in Arabic spelling, see ZACK, PILETTE, DEN HEIJER 2021.

<sup>62</sup> The term *al-‘Aḡam* is often used to refer to Persians but can indeed apply to any other non-Arab ethnic entity, see GABRIELI 1960. The translation of the document in question provided by the APD renders *al-‘Aḡam* as “the Copts”, which is acceptable in the Egyptian context as long as one realises that it is an interpretation rather than a translation. Khoury’s translation runs “le premier jour de khoiak, (l’un) des mois des non arabes”. KHOURY, GROHMANN 1993, No. 61.

in passages related to the Nile to be sure,<sup>63</sup> but also in accounts of events pertaining to climatology<sup>64</sup> or more general social and economic issues.<sup>65</sup>

At the end of this section on the pre-Fatimid situation, those documents that do mention the *ḥarāğ* year are also in need of some clarifications. The receipt for guarantee of *ḥarāğ* from Tuṭūn (No. 15) is probably the oldest known case of the explicit mention of the tax year (the edition reads *ḥārīğiyya*; *ḥarāğiyya* is Diem's emendation), even if Diem's datation to 289 AH/901-902 CE makes it no less than thirty years younger than Frantz-Murphy's reading (259) did. Since the text concerns the payment of tax due for the year in question, it does not mention any month in particular. In the other, very similar, document from Tuṭūn (No. 16), the word *ḥarāğiyya* was supplied by Diem as part of his emendations. There is no mention of a specific month here either, unlike in the receipt for payment (No. 17), which concerns the *ḥarāğ* due for the tax year 344 and whose first line runs "Installment (*nağm*) of Ba'ūna," thus using the Coptic month. Finally, however, the certificate of registration of land (No. 18) mentions taxes due for the tax year 347 (*al-ḥarāğiyya*), while using the month of Rağab for unambiguously dating the writing of the document to the *hiğra* year 348.

### 3. The use of the *ḥarāğ* year in the Fatimid period and beyond: documentary evidence and various literary sources.

#### 3.1. An official parallel calendar.

From literary sources, it is known that the Islamic solar year was given official status by al-'Azīz, the second Fatimid imam-caliph to rule in Cairo, in 366 AH/976 CE and that it henceforth came to be used as a general time unit for dating various aspects of public life. The method of skipping one numbered solar year was henceforth referred to more elaborately, as *taḥwīl al-sana al-ḥarāğiyya ilā l-sana al-hiğriyya (al-'arabiyya)* "conversion of the *ḥarāğ* year into the (Arab) *hiğra* year".<sup>66</sup>

This procedure is discussed in detail by the 12<sup>th</sup> century judge (*qāḍī*) Abū al-Ḥasan al-Maḥzūmī, who is quoted by the historians al-Qalqašandī<sup>67</sup> and al-Maqrīzī,<sup>68</sup> respectively. These authors explain that in Fatimid Egypt, this *taḥwīl* procedure was neglected since its introduction in 376/986-987 until the adjustment ordered by the vizier al-Afdal, in the year

<sup>63</sup> E.g., AL-YA'QŪBĪ, *Kitāb al-Buldān*, 1, p. 178. In the famous story of the the abolition by the Arab conquerer 'Amr b. al-'Āṣ of the traditional annual sacrifice of a maiden to the Nile, Ibn 'Abd al-Ḥakam refers to "Ba'ūna of the months of the 'Ağam", IBN 'ABD AL-ḤAKAM, *Futūḥ Miṣr*, p. 150-151 (cf. above, note 63). In a literary analysis of the passage in question, Anouar Louca eloquently and adequately explains this as follows: "Les Égyptiens, ces autochtones dont le temps et l'espace attestent l'authenticité, sont des 'Ağam, c'est-à-dire des non-arabes (définis donc non en eux-mêmes, mais en fonction de l'identité arabe)", see LOUCA 1981, p. 186. Centuries after Ibn 'Abd al-Ḥakam, however, Yāqūt uses the term "Ba'ūna of the months of the Copts" in his version of the same narrative. YAQŪT, *Mu'ğam al-Buldān*, 5, p. 335.

<sup>64</sup> E.g., AL-MAS'ŪDĪ, *al-Tanbīh wa-l-Išrāf*, 1, p. 44.

<sup>65</sup> E.g., AL-KINDĪ, *Kitāb al-Qudāt*, p. 300. Besides, this qualification is also used in works on chronography and astronomy, such as AL-BATTĀNĪ, *Kitāb al-Ziğ*, which must remain outside the scope of this study. For examples of the expression in later texts, see below, section 3.2.

<sup>66</sup> GROHMANN 1966, p. 30.

<sup>67</sup> AL-QALQAŠANDĪ, *Šubḥ al-A'sā*, 13, p. 54-62.

<sup>68</sup> The latter author's lengthy chapter, *Dīkr taḥwīl al-sana al-ḥarāğiyya al-Qibṭiyya ilā l-sana al-hilāliyya al-'Arabiyya* "The mention of the conversion of the Coptic *ḥarāğ* year into the Arabic lunar year", AL-MAQRĪZĪ, *al-Ḥiṭaṭ*, 1, p. 740-763, contains several quotes from al-Maḥzūmī's *Minhāğ*.

501/1107-1108<sup>69</sup>: as a result of this long period of neglect, a discrepancy of four years had accumulated between the two systems, in that the lunar year had “overtaken” the *ḥarāğ* year by four years, and both calendars were now used side by side, as separate dating devices.<sup>70</sup>

### 3.2. Dates and identities in documents from the Fatimid period

In the Fatimid period, the *ḥarāğ* dating system appears to have been used in a wide range of domains, and, unlike the pre-Fatimid examples quoted above, many of the relevant documents mention this system explicitly. The following selection of twenty documents, presented in chronological order, may be taken as representative of the distribution of Coptic and Islamic months and of *ḥarāğ* and *hiğra* years:

1. Lease contract for a house; al-Ušmūnayn; Iqbāl Ibn al-Ḥayr al-Nahrīrī, the employee (*al-ağīr*),<sup>71</sup> ‘Alī b. Aḥmad, known as Abū Quḍā‘a the weaver (*al-ḥā’ik*), Murqus al-Tinnīsī, Dağāsa, wife of Ḥalīfa al-Mağribī, ‘Alī b. Ḥafṣ b. Muhā[ğir] (witness), Naşr Ibn ‘Umar Ibn ‘Abd al-Muslim (witness), Şurayḥ Ibn ‘Alī Ibn al-Ḥusayn (witness): Abīb [383] till Misrā 384 [AH], Rabī‘ al-āḥar 383 [AH].<sup>72</sup>
2. Debt acknowledgement; unknown (Egypt); Abū ‘Abd Allāh Muḥammad b. Aḥmad the trader (*al-tāğir*), Qūrīl b. ‘Abd al-Masīḥ: 388-389 *ḥarāğiyya*; 388 [AH]; 389 [AH].<sup>73</sup>
3. Receipt of dues for land development; unknown (Egypt), Nahr Ğaff;<sup>74</sup> A[ḥmad] and Muḥammad al-Ḥaddādī; “the noble Lady” (*al-sayyida al-şarīfa*); Ḥasan b. Ḥamza (scribe); [?] the farmer (*al-fallāḥ*): 400 *ḥarāğiyya*, Dū al-Ḥiğğa 401 [AH].<sup>75</sup>
4. Tax receipt; Abū Bilqās;<sup>76</sup> Sahl b. Abī l-Ḥayr the paymaster (*al-ğahbad*): 40[2?] *ḥarāğiyya*/Tuesday, 15 Ğumādā II 404 [AH].<sup>77</sup>
5. Receipt of lease sum; [A]bū Bilqās;<sup>78</sup> [?] b. ‘Abd Allāh ibn Tammām, [?] the paymaster (*al-ğahbad*): 403 *ḥarāğiyya* /25 Muḥarram II 405 [AH].<sup>79</sup>
6. Receipt for payment of *ḥarāğ*; al-Ušmūnayn; the heirs of ‘Ukāşa; Baqām<sup>80</sup> b. Şanūda the paymaster (*al-ğahbad*): Wednesday, 11 Barmūda; 404 *ḥarāğiyya*; Şawwāl [40]5 [AH].<sup>81</sup>

<sup>69</sup> This measure was related to the cadaster (*rawk*) ordered by al-Afḍal in the same year, see CAHEN 1974, p. 174 (after Mūsā b. al-Ma’mūn al-Baṭā’ihī and al-Maqrīzī); RABIE 1972, p. 134; HALM 1979-1982, 1, p. 11-13. In the rival Abbasid caliphate, the tax year was abolished in the same year, see GROHMANN 1966, p. 31.

<sup>70</sup> RABIE 1972, p. 133-134; SAYYID 2000, p. 520.

<sup>71</sup> Or day labourer (transl. Khoury: “der Tagelöhner”).

<sup>72</sup> Chrest.Khoury II 24 (P.Vind.inv. A.Ch. 28040 recto); emendation(s): THUNG 2006, p. 86.

<sup>73</sup> P.CahenDette = Chrest.Khoury I 45 (P.Stras.inv. Ar. 118 recto).

<sup>74</sup> In the translation as provided by the APD, this is transcribed as a place name, although it might mean simply “a river that has dried up”.

<sup>75</sup> P.Steuerquittungen 30 (P.Heid.inv. Arab. 309 verso).

<sup>76</sup> This is the village mentioned in the document. With regard to its provenance, the APD lists this document as “unknown (Egypt).”

<sup>77</sup> P.Steuerquittungen 50 (P.Heid.inv. Arab. 2722 recto).

<sup>78</sup> This is the same village as the one mentioned in the document above (4), but here it is written without the initial *alif*, a common phenomenon in Egyptian toponyms starting with Bū-/Abū-. See FISCHER, JASTROW 1980, p. 92, p. 309 note 127; TIMM 1984, p. 460, 462, 463-464; DEN HEIJER 1989, p. 40. Again, the APD lists this document as “unknown (Egypt).”

<sup>79</sup> P.Steuerquittungen 54 (Inv. No.: P.Heid.inv. Arab. 2030 verso).

<sup>80</sup> Or, more likely, Bifām, cf. *supra*, section 2.2, No. 16; No. 11 in the present list; and cf. DEN HEIJER 2015, p. 468.

7. Account relating to agrarian administration; al-Fuṣṭāṭ, Badsā,<sup>82</sup> Buḡtur b. Sisinna the superintendent (*al-ḥawli*);<sup>83</sup> the *ṣarīf* Ismā‘īl ibn al-Qāsim al-Ġa‘farī: 401 and 402 *ḥarāġiyya*.<sup>84</sup>
8. Fragments from a tax register; al-Fayyūm: Tuṭūn, Aṭfīḥ,<sup>85</sup> [?] the headman (*al-rayyis*), al-Aḥmadiyya: 401 *ḥarāġiyya*.<sup>86</sup>
9. Register of irrigated property and acknowledgment of debt; al-Fayyūm; Isma‘īl the client (*mawlā*) of Isma‘īl, ‘Ardarī al-Muqṣādī: 415 *ḥarāġiyya*.<sup>87</sup>
10. Lease of fallow land; Naqlūn, Aṭfīḥ Šallā;<sup>88</sup> Mīnā b. Lubda, Ġirġa b. Bifām, [?], the paymaster (*al-ġahbaḍ*), Sulmā b. Dār al-Ḥikma: 413 *ḥarāġiyya*, Raġab 414 [AH].<sup>89</sup>
11. Receipt for payment of *ḥarāġ*; Naqlūn, Damūyat al-Lāhūn;<sup>90</sup> Ġirġa b. Bifām,<sup>91</sup> the paymaster (*al-ġahbaḍ*), Sarfad b. Yaḥyā the scribe (*al-kātib*): 412 *ḥarāġiyya*, Ša‘bān 414 [AH].<sup>92</sup>
12. Receipt for payment of *ġizya*; Naqlūn, Damūya; Abū al-Riġāl, Ġirġa b. Bifām, scribe:<sup>93</sup> Maṣṣūr b. ‘Abd al-Masīḥ: 413 *ḥarāġiyya*; Ramaḍān 414 [AH].<sup>94</sup>
13. Contract of sale; al-Fayyūm, Barbanūda;<sup>95</sup> ‘Alī b. Hibat Allāh b. Ḥalaf b. Muḥammad b. Šaraf al-Muḍarī (or al-Miṣrī), Marqūra b. Mīnā the barber (*al-muzayyin*), Bifām,<sup>96</sup> Madrīya and Qryhw, children of Alakū, Tanūš and Alakū, children of Šanūda b. Alakū, Kīl, Hiliya, Yuḥannis and Qarisiya, children of Astāsa b. Alakū, Daraka bt. Šanūda, Bīna, Mariya bt. Šalād bt. Tīdur, Bashad (?), wife of Tīdur, Hiliya b. Adwīn, Qirā bt. Sbyh bt. Adwīn, Yuhannis <b. Sbyh> (?) bt. Adwīn, Abwīš (?), Abfatfiya (?) b. Qulta, Lāqīda b. Qarhū (?), Maymūn ibn Muḥammad ibn al-Maḥrūm (witness), Abū al-Qāsim b. Ramaḍān b. Yaḥyā b. Qurayš (witness), Silka b. Ibrāhīm b. Bābawayh (witness), Muḥammad b. al-Būsirī (?) (witness):<sup>97</sup> 17 Amšīr 413 *ḥarāġiyya* = 30 Dū al-Qa‘da 414 AH.<sup>98</sup>

<sup>81</sup> P.Cair.Arab. 194 (P.Cair.EgLib.inv. 188 verso); emendation(s): DIEM 2006, p. 63.

<sup>82</sup> The document was issued in al-Fuṣṭāṭ and concerns an estate (or hamlet?) (*day‘a*) known as Badsā.

<sup>83</sup> ADP: “the overseer.”

<sup>84</sup> P.GenizahCambr. 132 (P.Cam.inv. TS Ar. 30 175 recto); emendation(s): DELATTRE, MARTIN, VAN-THIEGHEM 2016, p. 220.

<sup>85</sup> As stated in the ADP, the exact provenance within al-Fayyūm is unknown; Tuṭūn and Aṭfīḥ are mentioned in the document.

<sup>86</sup> P.Prag.Arab. 39 (P.Prag.inv. Arab. II 105 a recto).

<sup>87</sup> CPR XXI 37 = PERF 1147.

<sup>88</sup> The document is from Naqlūn and mentions fallow lands located in Aṭfīḥ Šallā.

<sup>89</sup> P.Fay.Villages 28 (P.Naqlun inv. 97087 verso).

<sup>90</sup> The document is from Naqlūn and mentions Damūyat al-Lāhūn.

<sup>91</sup> Ġirġa b. Bifām also appears in other documents, see above, No. 10.

<sup>92</sup> P.Fay.Villages 29 (P.Naqlun inv. 97052).

<sup>93</sup> The term *al-kātib* is translated here as “le greffier”.

<sup>94</sup> P.Fay.Villages 31 (P.Naqlun inv. 97084 verso).

<sup>95</sup> As stated in the ADP, the exact provenance within al-Fayyūm is unknown. The document mentions an estate (or hamlet) (*day‘a*) known as Barbanūda belonging to the province of (*kūrat*) al-Fayyūm.

<sup>96</sup> Instead of “Bifām” (see above No. 6), the translation and the APD read “Pqām”. Some of the other vocalizations also slightly different in the translation and the APD.

<sup>97</sup> In the grammatical analysis (“lexicon”), the APD interprets this *nisba* as “Būšīrī”.

<sup>98</sup> P.KölnKauf. (P.Oppenheim inv. flesh side).

14. Decree by the imam-caliph al-Zāhir in favour of the Coptic monks; Cairo;<sup>99</sup> the late imams al-Mu‘izz li-Dīn Allāh, al-‘Azīz bi-Allāh and al-Ḥākim bi-amr Allāh:<sup>100</sup> Muḥarram 415 [AH].<sup>101</sup>
15. Petition concerning a church; al-Fuṣṭāṭ; no names: 421 *ḥarāḡiyya*.<sup>102</sup>
16. Acknowledgement of a debt in kind (produce of agriculture); Ṭuṭūn; Ğarrāḥ b. Ziyād, Abū l-Dīn b. Ramaḡān al-Rabī‘, Sulaym b. Yaḥyā b. Qaṭīṭ (witness and scribe), Ğalūd b. Ḥamīs (witness), ‘Aws b. ‘Ammār (witness), Ma‘rūf b. Ḥalaf (witness):<sup>103</sup> Ba’ūna 443 *ḥarāḡiyya*; Šawwāl 445 [AH].<sup>104</sup>
17. List of orders for payment and receipts; al-Ušmūnayn; Ṭuṭūn; Šubḥ b. ‘Abd al-Masīḥ, delegate (*nā’ib*) of Šulḥ<sup>105</sup> b. [‘Imr]ān, the paymaster (*al-ḡahbaḡ*), Ğirḡa b. Isṭūrus, the paymaster (*al-ḡahbaḡ*), Šadiq<sup>106</sup> b. Dawūd, delegate (*nā’ib*) of Ğirḡa the paymaster, Bamūy b. Šanūda, Bannūš al-Baššār: 449 *ḥarāḡiyya*: [1] Friday, [2 nights] passed of the month of Rabī‘ al-awwal, Bašans 20, [2] Saturday, 10 nights passed of Rabī‘ al-awwal, Bašans 22, [3] 15 (*nišf*) of the month of Rabī‘ al-awwal, Bašans 27, [4] Sunday, 12 [nights] remaining of the month of Rabī‘ al-awwal, [5] Friday, 5 passed of Ba’ūna, Rabī‘ al-awwal, [6] [?] of the month of Rabī‘ al-awwal, [7] Monday, 3 passed of the month of Rabī‘ al-Āḡir, Ba’ūna 15, [8] Tuesday, 4 passed of the month of Rabī‘ al-Āḡir, Ba’ūna 16, [9] Thursday, Rabī‘ al-Āḡir 6, Ba’ūna 18, [10] Sunday, Rabī‘ al-Āḡir 16, Ba’ūna 28, [11] Day 3 (Tuesday), Rabī‘ al-Āḡir 18, Ba’ūna 30, [12] Monday, 5 [nights] remaining of Rabī‘ al-Āḡir of the year 9 (=449), Abīb 7, [13] Saturday, Rabī‘ al-Āḡir 29, Abīb 11, [14] Day 4 (Wednesday), Ğumādā al-awwal (*sic*, cf. Classical Arabic *al-ūlā*) 4, Abīb 15.<sup>107</sup>
18. Written obligation; al-Fayyūm; Marqūra b. Murqus, the priest (*al-qissīs*) from Barbanūda (al-Barbanūdī), Samawīl b. Abīma al-Ġawwābī, Ismā‘īl b. Ādam al-Ṭalīṭī (scribe), Išḡāq Ibn Muḡtār (witness), Sulaymān Ibn Muhāḡir (witness): Ba’ūna 449 *ḥarāḡiyya*, Dū al-Ḥiḡḡa 451 *hilāliyya*.<sup>108</sup>
19. Contract of a tax farmer; al-Fuṣṭāṭ; Qabīl;<sup>109</sup> The Imām al-Mustanšir Billāh, the Amīr al-Ġuyūš Sayf al-Islām,<sup>110</sup> Ḥātim b. Faraḡ, the sheikh Abū Išḡāq Ibrāhīm b. Munaḡḡā,

<sup>99</sup> The place is not mentioned in the conserved part of this incomplete document, but several departments (sg. *dīwān*) of the Fatimid administration occur in it.

<sup>100</sup> The imam-caliph al-Zāhir, in whose name the document was issued, is referred to simply as *amīr al-mu‘minīn* “Commander of the Believers”.

<sup>101</sup> P.GrohmannFatimidenerlas (P.Fatimid 1 .30 b upper 30 c).

<sup>102</sup> P.GenizahCambr. 70 (P.Cam.inv. TS Ar. 7 38 recto).

<sup>103</sup> The readings and qualifications followed here are based on the emendations by Y. Rāḡib (see next footnote).

<sup>104</sup> Chrest.Khoury I 33 = P.RagibQalamun 1.

<sup>105</sup> Or Šāliḡ, written with *scriptio defectiva* (صلح).

<sup>106</sup> Or Šiddīq.

<sup>107</sup> P.Prag.Arab. 49 (P.Prag.inv. Arab. I 10).

<sup>108</sup> Chrest.Khoury II 34 = (descr.) PERF 842.

<sup>109</sup> The document concerns an estate known as Qabīl and was issued in the Fatimid capital.

<sup>110</sup> The imam-caliph al-Mustanšir (427/1036–487/1094) and the effective ruler of the Fatimid Empire, the military vizier Badr al-Ġamālī (66/1074–487/1094) respectively. See HALM 2003, p. 419-420; HALM 2007; HALM 2014, p. 17-86; DEN HEIJER 2007. The honorific titles and formulas attached to their names in the document are largely identical with those found in inscriptions from the same period such as the one discussed below, section 3.3.



Mūsā b. ʿĪsā, Hāmid b. al-Ḥasan ibn Dīnār (witness), Zayd b. Ḥāmid al-Sarūgī (witness): 477 *ḥarāḡiyya*, the first ten days of Šawwāl 480 [AH].<sup>111</sup>

20. *Mahzūma* account relating to the production of sugar and honey; al-Fuṣṭāt;<sup>112</sup> Muḥammad b. ʿAlī, representative (*wakīl*) of the factory, ʿAlī b. al-Ḥasan b. ʿAlī (scribe): 490 *ḥarāḡiyya*, Monday 26 Barmūda till Saturday 1 Bašans 491 *ḥarāḡiyya*, Raḡab 495 [AH].<sup>113</sup>

In two of these selected documents, only the *hiḡra* years are used, in one case (No. 1) in combination with the Coptic months. The lease contract mentioned there is for “fourteen months, the first of which is the month of Abīb and the last of which is Misrā which falls (*al-ḡārī*) in the New Moons of (*fi ahillat*) the year three-hundred eighty-four.” The contract was written and signed by the witnesses in Rabīʿ II 383 [AH] (for the second witness, the mention of the month is repeated). Murqus al-Tinnīsī and Daḡāsa, wife of Ḥalīfa al-Maḡribī are probably the respective owners of the two neighbouring dwellings. Whereas the owner of the house itself has the manifestly Muslim name ʿAlī b. Aḡmad, and the female neighbour’s name is likely to be Muslim as well, the employee’s name is less certain and the other neighbour has the (Graeco-) Coptic name Murqus and hails from the city of Tinnīs. In the Fatimid period this was a Coptic majority town, famous for its textile production.<sup>114</sup> The three witnesses all have Muslim names.<sup>115</sup> Regarding the linguistic aspects of these names, it is worth noticing that ʿAlī b. Aḡmad is presented as “known as” (*al-maʿrūf bi-*) Abū Quḏāʿa, with “Abū” in the nominative, a very common Middle Arabic feature. Furthermore, since the text is mostly undotted, the word “the weaver” could be read either as Classical Arabic *al-hāʾik* or as colloquial *al-hāyik*. The official document issued by the Fatimid administration (No. 14) also uses the *hiḡra* date exclusively even though it entirely concerns the Coptic community and more precisely its monastic environment.

Three documents combine the *ḥarāḡ* and *hiḡra* systems in their factual content. In the receipt for lease from Abū Bilqās (No. 5), 403 *ḥarāḡiyya* is the year for which payment was due, whereas the *hiḡra* date refers to the transaction as such. The first proper name is that of the tax collector; although only partly legible, it is clearly Arabic and probably Muslim. The paymaster’s name, on the other hand, cannot be read in this document. The receipt for payment of *ḥarāḡ* (No. 6) states the day and the Coptic month (without year) at the beginning of the document. This is followed by Islamic formulary (*wal-ḥamdu lillāhi kaṭīran* “and praise be much to God”) and the *basmala*, respectively. The payment for the *ḥarāḡ* year 404 was made in Šawwāl of the year [40]5 [AH]. In this case, the paymaster’s name is clearly Coptic. The debt acknowledgement of unknown provenance (No. 2) combines the months and years in an interesting fashion: the two *ḥarāḡ* years 388 and 389 are the years in which the debt must be repaid: “two dinars in the month of Bašans of the year three hundred eighty-eight, which falls (*al-ḡārī*) in the New Moons of (*ahillat*) the year three hundred eighty-nine, and two dinars in the month of Bašans of the year three hundred eighty-nine, which falls (*al-ḡārī*) in the New Moons of (*ahillat*) the year three hundred ninety.” Thus, both tax years are linked

<sup>111</sup> P.GenizahCambr. 63 (P.Cam.inv. TS Ar. 40 153 recto and verso).

<sup>112</sup> The sugar and honey factory is that of *ملعارة*, which remains unidentified and may or may not be a place name.

<sup>113</sup> P.GenizahCambr. 134.

<sup>114</sup> HALM 2003, p. 15-18.

<sup>115</sup> Whereas in the earliest stage of Islamisation of the Middle East, non-Muslims could be accepted as witnesses, Muslim jurisprudence excluded them from this later on. See TILLIER 2017, p. 274-279.

to the *hiğra* year with the same formula encountered above (No. 1). At the linguistic level, the grammatical construction *fī sanatayn tamān wa-tis‘ wa-tamānīn wa-talāt mi‘a al-ḥarāğiyya* “in the two tax years three hundred eighty-eight and three hundred eighty-nine”, with the dual ending *-ayn* in the construct state and the adjective in the singular, is a common feature of Middle Arabic, and stands out as an instance of code switching amidst several Classical Arabic features, such as the accusative after the vocative particle in *yā Abā ‘Abd Allāh (...)*.<sup>116</sup> The writer of the document explicitly mentions the lunar year as well, to mark the end of the transactions between the two parties: “and that is the end of what there is between you and me, until the last day (*salḥ*) of the lunar (*al-hilāliyya*) year three hundred eighty-eight.” Finally, the month in which the document was drawn up is given according to the Islamic calendar: “in the month of Rabī‘ I of the year three hundred eighty-nine.” In this text, Abū ‘Abd Allāh Muḥammad b. Aḥmad the trader (*al-tāğir*) is the creditor, and Qūrīl b. ‘Abd al-Masīḥ is the debtor, who also wrote the document in his own handwriting (*bi-ḥaṭṭihi*). His unambiguously Christian identity (‘Abd al-Masīḥ “Servant of Christ”) does not prevent him from concluding the text, addressed to his Muslim creditor, with the *hiğra* month and year (see below) and the Qur’ānic formula *ḥasbunā Allāhu wa-ni‘ma al-wakīl* “God is enough for us; and how excellent a guardian is He!” (*Qur’ān*, 3:173).

All remaining documents within this selection make exclusive use of the *ḥarāğ* year, with or without Coptic months, when it comes to the content. Thus, in the account on agrarian administration (No. 7), the two *ḥarāğ* years are the successive years of the estate’s produce; one of the two persons involved has a Coptic name and the other one an Arabic name, suggesting a Muslim identity. The fragments from a tax register concerning the year 401 *ḥarāğiyya* (No. 8) mention an individual whose name is illegible; in the ADP, the obviously colloquial form *al-rayyis* (الريس) following the name is partly classicized as *al-ra‘is* (cf. Classical Arabic *ra‘īs*) and taken as a proper name, which is not impossible but seems quite unlikely within the context of the document. In any event, the confessional identity of the person cannot be known. This fragmentary text also contains the *nisba* al-Aḥmadiyya “of (in the sense of “belonging to”) Aḥmad”, an unambiguously Muslim name. The ADP lists the request concerning a church (No. 15) as a “Petition to al-Zāhir requesting the return of a church to the Christian community.” To be more precise, the petitioner asks for either a financial compensation for (i.e., during, rather than “within”) four years (4 x 6 dinars, total 24 dinars), or the return of the church to the “Christians of the district” (*Naṣārā al-nāḥiya*). The first of these four years is 421 *ḥarāğiyya*.

The list of orders for payment and receipts from al-Ušmūnayn (No. 17) has a somewhat special format. It still uses the *ḥarāğ* year only, but does mention Islamic as well as Coptic months. The year 449 *ḥarāğiyya* is mentioned in what can be read as a title, or heading; all these items are listed without further mention of the year except item [12] which abbreviates it as “of the year 9”. For this *ḥarāğ* year, the *hiğra* dates (month and day) are given first and followed by the Coptic ones, except in item [5] where the Coptic month comes first. The prosopography of the document points at both Christian and Muslim profiles. In more or less the same vein, the tax receipt from Abū Bilqās (No. 4), combines the *ḥarāğ* year with an Is-

<sup>116</sup> With regard to Middle Arabic features such as this one (form of the dual) and the use of the nominative where Classical Arabic requires a genitive case, it should be pointed out that the ADP systematically provides a full vocalisation (the last version of every single line) as well as full transliterations of all texts. While this mode of presentation is certainly useful, it is frequently unlikely to reflect linguistic reality and, moreover, sometimes yields problematic results. In fact, Middle Arabic features are quite common in documentary texts and have been adequately studied, see, e.g., HOPKINS 1984; DIEM 2011; cf. DEN HEIJER 2012, p. 21.

lamic month: the date is written in the heading as *yawm 3 Ğumādā 15* and at the end, referring to the transaction, as *li-'arba'a 'ašra ḥalat min ġumādā al-āhira sanat arba' wa-'arba'mi'a* “forteen [nights] past of Ğumādā II of the year four hundred and four”. The (not entirely legible) tax year is the one for which payment was due. The Arabic name of the paymaster, Sahl b. Abī l-Ḥayr, could belong to a Muslim or to a Christian individual.

No less than nine documents, in this limited corpus of twenty, use the the *ḥarāġ* year for the factual contents but the *hiġra* calendar for the date of redaction. Thus, the register of irrigated property and acknowledgment of debt (No. 9) concerns an assessment for the *ḥarāġ* year 415, and was written in Ša'bān 416 [AH]. Both protagonists are presumably Muslim. The latter is the author of the document and, in the first person singular, uses well-known Islamic formulary: *qad istaḥartu Allāh ġalla wa-'azza kaṭīran* “I asked God, may He be praised and exalted, much for proper guidance.” Similarly, the lease of fallow land from Naqlūn (No. 10) pertains to the assessment of the *ḥarāġ* year 413, and is dated to Raġab 414 [AH]. Again, the author of this document, a person whose name the editors of the document identified as Sulmā b. Dār al-Ḥikma, writes *qad istaḥartu Allāh ġalla ismuhū* “I asked God, exalted be His name, for proper guidance”, whereas in this case, the persons involved have typical Coptic names: Mīnā b. Lubda and Ġirġa b. Bifām.<sup>117</sup> Another individual's name cannot be read, and the paymaster (*al-ġahbaḍ*) is not identified by name. In the receipt for payment of *ḥarāġ*, also from Naqlūn (No. 11) the tax was due for the year 412 *ḥarāġiyya* and the document was written in Ša'bān 414 [AH]. Here as well, the name of the paymaster (*al-ġahbaḍ*) is not mentioned and the editors left this term untranslated. Another document from Naqlūn is the receipt for payment of the *ġizya* tax owed by non-Muslims. This tax was due for the year 413 *ḥarāġiyya* and the document as such is dated to Ramaḍān 414 [AH]. The *kunya* Abū l-Riġāl of the first individual mentioned in it is confessionally neutral, but it is interesting to note that the scribe whose name is 'Abd al-Masīḥ “Servant of Christ” uses *al-ḥamdu li-llāhi rabbi l-'ālamīn* (Qur'ān, 1:1) and the Islamic *basmala*. This formulary also occurs in two texts that are almost identical with the present one but lack the name Abū l-Riġāl.<sup>118</sup> Ġirġa b. Bifām also appears in other documents (see above, No. 11). The receipt of dues for land development of unknown provenance (No. 3), pertains to the amount due for the year 400 *ḥarāġiyya* and the rate (*naġm*) of Abīb of that year. The text was written in Dū al-Ḥiġġa 401 [AH]. Four names, including that of the scribe, are Muslim Arabic ones, whereas the illegible name of a farmer might be Coptic: tentative transcriptions of دلس or ديسي adopted in the ADP are D\*b\*I\*s, Danilus and Diyīsī. The *Maḥzūma* account (No. 20) concerns production of sugar and honey over a period starting on Monday, 26 Barmūda and ending on Saturday, 1 Bašans of the year 491 *ḥarāġiyya*, involving two persons with Muslim names; it was written in Raġab 495 [AH].

Within the same category, some documents record the names of witnesses and these can always be identified as Muslims, within this small corpus.<sup>119</sup> Among these texts, the contract of a tax farmer for the estate known as Qabīl (No. 19), mentions the *ḥarāġ* year 477 as the period for which *zakāt* taxes are due and is dated to the first ten days of Šawwāl 480 [AH].

<sup>117</sup> For the name Bifām, see above, No. 6. The name Sulmā (or, alternatively, Salmān) b. Dār al-Ḥikma has Shiite connotations, as pointed out by the editors, see GAUBERT, MOUTON 2014, p. 129-130. This would be a rare case of an explicitly Shiite name in texts from Fatimid Egypt.

<sup>118</sup> P.Naqlun inv. P.Fay.Villages 30 (412 *ḥarāġiyya*) and P.Fay.Villages 30 (413 *ḥarāġiyya*), both written by the same scribe, in the same month as the document discussed here.

<sup>119</sup> See above, note 116.

Similarly, the written obligation from al-Fayyūm (No. 18) involves two Coptic Christians (the first one being a priest), two Muslim witnesses and a scribe who is probably Muslim as well. The obligation pertains to Ba'ūna 449 *ḥarāḡiyya* whereas the document itself was written down in Dū al-Ḥiḡḡa 451, a year which, in this case, is explicitly called *hilāliyya* “lunar”. The same adjective appears in a sales contract, from al-Fayyūm as well (No. 13), the only sample in this corpus that is dated to (*kutiba fī* “was written in”) a *ḥarāḡ* year, with mention of the exact date and the corresponding *hiḡra* date: *yawm al-arbi‘ā’ li-ṭalāt ‘ašar baqīna min Amšīr sanat ṭalāt ‘ašar wa-arba’ mi’a al-ḥarāḡiyya al-muwāfiq salḥ Dū al-Qa‘da sanat arba’ ‘ašar wa-arba’ mi’a al-hilāliyya* “Wednesday, thirteen days remaining of Amšīr of the year four-hundred and thirteen *ḥarāḡiyya*, corresponding to the last day of Dū al-Qa‘da of the year four-hundred and fourteen lunar.” The author of this parchment document is one ‘Alī b. Hibat Allāh. Not only does his name reveal a clear Muslim identity, but if his *nisba* was read correctly as al-Muḍarī, he must have been of Arab descent. He uses the Islamic *basmala*. The parties involved in the transaction, on the other hand, all seem to be Copts: the purchaser is called Marqūra b. Mīnā and the vendors are a large group of men and women, several of whose names are uncertain and unfamiliar but all are highly likely to refer to a Coptic and Christian profile. This impression is further confirmed by three reference to a road (*tarīq*) known as al-Ṣalīb “the Cross”.

The last item to be discussed in this analysis is the acknowledgement of a debt in kind from Ṭuṭūn (No. 16). The testimonies of the witnesses (Muslim, as are the two persons involved in the issue) were recorded in Šawwāl 445 [AH], whereas the settlement was due “in the month of Ba'ūna of the months of the Copts” (*min šuhūr al-Qibṭ*) of the year four hundred and forty-three *al-ḥarāḡiyya*”, with the expression commented upon above (2.2).

To sum up, as in the pre-Fatimid examples discussed in the previous section, the use of Coptic and Islamic months, whether linked to a *hiḡra* year, to a tax year or to both, again turns out to be fairly complex and difficult to explain in terms of functional distribution. One thing is clear, however: even if it is only in one document included in the present corpus (No. 16), the awareness of the specific character of the Coptic months remains visible. And indeed, this expression continued to be used for a very long time indeed as can be inferred from literary sources ranging from the twelfth century until, occasionally, as late as the nineteenth century. While most passages in question deal with the Nile,<sup>120</sup> with climate, irrigation, agriculture, plants and flowers or with livestock, fishery and meat production,<sup>121</sup> with technical issues of time computation and comparative chronography,<sup>122</sup> or indeed with the Coptic community,<sup>123</sup> the Coptic months – mentioned as such – are also used occasionally as general markers of time, besides the *hiḡra* date.<sup>124</sup> Furthermore, Coptic months are frequently used without this qualification, in notes on topics very similar to the ones just mentioned, such as land tax

<sup>120</sup> E.g., AL-MAḤZŪMĪ, *al-Minhāḡ*, p. 34; ABŪ AL-FIDĀ’, *al-Muḥtašar*, 4, p. 67; AL-MAQRĪZĪ, *al-Sulūk*, 7, p. 141; IBN TAGRĪ BARDĪ, *Ḥawādīt*, 2, p. 332; IBN ‘ABD AL-ḤAQQ, *Marāšid al-Iṭṭilā’*, 3, p. 413-414.

<sup>121</sup> E.g., AL-MAḤZŪMĪ, *al-Minhāḡ*, p. 5-8 (with the expression *šuhūr al-sana al-Qibṭiyya* “months of the Coptic year”); AL-NUWAYRĪ, *Nihāyat al-Arab*, 1, p. 356; AL-QALQAŠANDĪ, *Šubḥ al-A‘šā*, 3, p. 344, AL-ĠABARTĪ, *‘Aḡā’ib al-Ātār*, 3, p. 146 (from the 19<sup>th</sup> century, anecdote about heavy rainfall during a wedding procession).

<sup>122</sup> E.g., IBN AL-DAWĀDĀRĪ, *Kanz al-Durar*, 1, p. 91; AL-BATTĀNĪ, *Ziḡ al-Šābi’*, p. 38; AL-NUWAYRĪ, *Nihāyat al-Arab*, 1, p. 159, p. 169; AL-TIFĀŠĪ, *Surūr al-Nafs*, p. 218.

<sup>123</sup> E.g., AL-QALQAŠANDĪ, *Šubḥ al-A‘šā*, 2, p. 153; AL-MAQRĪZĪ, *al-Ḥiṭaṭ*, 1, p. 714-729 (both about the religious festivals of the Copts).

<sup>124</sup> E.g., AL-NUWAYRĪ, *Nihāyat al-Arab*, 31, p. 125 (date of birth of the sultan al-Malik al-Nāšir Muḥammad, in 684/1285).

(*ḥarāğ*) collection,<sup>125</sup> the Nile,<sup>126</sup> agriculture and livestock,<sup>127</sup> climate,<sup>128</sup> and Coptic religious life.<sup>129</sup>

### 3.3. Two colophons in a Coptic manuscript and a monumental Arabic inscription in Cairo

Outside the domains of documents and narrative sources discussed above, some glimpses, albeit indirect and rather uncertain ones, of the use of the *ḥarāğ* calendar might be found in two very different kind of contexts.

The first case is that of a Coptic Biblical manuscript with Coptic and Arabic colophons which seem to display a discrepancy of four years in the dates they mention (although the readings are rather uncertain). The Coptic colophon mentions the year 493 “of the Saracens”, which should be taken to mean the *hiğra* year (which corresponds to 1099-1100 CE), whereas the otherwise illegible Arabic contains the unit “seven” or “nine”. In the latter case, the year would be 489, which could very well make it a *ḥarāğ* year.<sup>130</sup>

The second case concerns the date of a monumental Arabic inscription on the Fatimid city wall, next to the gate known as Bāb al-Futūḥ.<sup>131</sup> The point here is that this inscription dates the beginning of the construction of the city wall to the month of Muḥarram of the year 480 of *al-hiğra al-ḥanīfiyya*. Gaston Wiet translated this simply as “de l’hégire hanifienne” but rightly noticed that such an explicit mention is quite exceptional in Arabic epigraphy, where the *hiğra* calendar is the norm and hence does not need to be specified.<sup>132</sup> At the time, Wiet sug-

<sup>125</sup> E.g., IBN ḤAWQAL, *Šūrat al-Ard*, 1, p. 164 (written in 977 CE and containing what is arguably the earliest contemporary description of Fatimid Egypt), cf. MIQUEL 1971; DUCÈNE 2017.

<sup>126</sup> E.g., AL-MAQRĪZĪ, *al-Sulūk*, 7, p. 62; IBN ḤAĠAR, *Inbā’ al-Ġumr*, p. 4, p. 180.

<sup>127</sup> E.g., AL-NAWAWĪ, *al-Mağmū’*, 11, p. 441; AL-MAQRĪZĪ, *al-Ḥiṭat*, 1, p. 730-739; AL-QALQAŠANDĪ, *Šubḥ al-A’šā*, 3, p. 346; AL-‘ABBĀSĪ AL-ŠAFADĪ, *Nuzhat al-Mālik wa-l-Mulūk*, p. 38. Additionally, the five calendars edited and analysed in PELLAT 1986 (to be read with the corrections made in RĀĞIB 1989 and RĀĞIB 1990) all concern agriculture and systematically refer to the Coptic months in general, sometimes with mention of such expressions as *al-sana al-Qibtīyya* “the Coptic year” but never within the context of any specific year. The *ḥarāğ* year does not occur in these calendars either.

<sup>128</sup> E.g., IBN ḤAĠAR, *Inbā’ al-Ġumr*, 3, p. 397, 4, p. 16; ‘ABD AL-LATĪF AL-BAĠDĀDĪ, *al-Ifāda*, 1, p. 5; AL-ŠAFADĪ, *A’yān al-‘Aşr*, 5, p. 510.

<sup>129</sup> E.g., AL-QALQAŠANDĪ, *Šubḥ al-A’šā*, 2, p. 461.

<sup>130</sup> This possibility was suggested by Ugo Zanetti (personal communication). Jacques van der Vliet, who, with Joost Hagen has studied the Coptic manuscript in question (which contains the Gospel of John, discovered at Naqlūn) and kindly provided its photograph, furthermore shared (personal communication) his impression that the Arabic could be understood as a reader’s note rather than an actual colophon, added slightly later to the Coptic colophon. In the latter case, the two notes would refer to two different years and thus lose their immediate relevance for the present argument.

<sup>131</sup> VAN BERCHEM 1903, p. 30-32.

<sup>132</sup> In the preceding centuries, explicit mention of the *hiğra* year is attested in Arabic epigraphy but appears late and even then remains extremely rare. The earliest known example, cited by Y. Rāğib, is found in Uzbekistan and is dated to 367/977; it is followed by an inscription in Tunisia from 393/1002 and another one in Khorasan from 411/1021-1022. See RĀĞIB 2007, p. 187. A seventh-century (CE) inscription found in Cyprus, reportedly mentioning the *hiğra* year 29, is only attested by a twelfth-century author, al-Harawī, who may well have altered the original text which is no longer extant, see TILLIER, VAN THIEGEM 2019, p. 184, note 49. The same expression as the one commented upon here, *al-hiğra al-ḥanīfiyya*, occurs twice in an unpublished Arabic history of the (pro-Chalcedonian) Byzantine Church apparently composed in Palestine in the twelfth century CE. see LEVY-RUBIN 2003, p. 202-203, mentioned by SHADDEL 2018, p. 279, note 26. According to M. Levy-Rubin, *ḥanīf* was a “loaded term” with ambiguous implications in the period in question and Christian authors could use

gested, on behalf of the famous writer, politician and scholar Ṭāhā Ḥusayn, that this exception could be read as an typical Shiite expression of the Fatimid devotion to the figure of Abraham.<sup>133</sup> Without necessarily contesting such an explanation, however, one could also hypothesise that the author of this text, exceptionally and quite redundantly (because the month of Muḥarram clearly makes it a *hiğra* year), felt the need to state that this date did *not* refer to the *ḥarāğ* year.<sup>134</sup> If this, admittedly very tentative, explanation were to be acceptable, it would further attest to the widespread use of the latter dating system in the Fatimid period.

#### 4. *The use of the ḥarāğ year in the Fatimid period: Copto-Arabic historiography.*

##### 4.1. *Mawhūb b. Maṣṣūr b. Mufarriğ and his biographies of Coptic Patriarchs*

Besides these isolated and definitely incomplete and uncertain snippets of evidence, and besides the valuable but significantly later accounts mentioned above in this paper, there is a much more elaborate narrative Arabic text that makes ample use of the *ḥarāğ* year, besides the Coptic year of the Martyrs and occasionally the *hiğra* year. This is the well-known *History of the Patriarchs of Alexandria*, the official history of the Coptic Church, whose core text was compiled in the late eleventh century CE by Mawhūb b. Maṣṣūr b. Mufarriğ, a prominent member of the Alexandrian Fatimid urban elite.<sup>135</sup>

Mawhūb's own original contribution to this corpus, which consists of the biographies of the two Coptic Orthodox patriarchs of the author's lifetime, contains numerous reports and notes on all kinds of events and circumstances related to Fāṭimid rule and particularly to the caliphate of al-Mustanşir Billāh and the vizirate of Badr al-Ġamālī, with due emphasis on the vicissitudes of his own Coptic community. Taken together with the contribution by his continuator, Yūḥannā b. Şā'id b. Yaḥyā b. Mīnā, these notes provide us with a unique picture of how the three different calendars, Martyrs, *hiğra* and *ḥarāğ*, could be used in narrative prose in this specific time and environment.

Incidentally, it is important to point out that, among the authors who contributed to the corpus of the *HPA* over the centuries, Mawhūb is the first one to make use of such a mixed dating system: his predecessors, the earlier historians writing in Coptic (whom, it should be remembered, we only know through the intermediary of Mawhūb's Arabic reworked translation), only used the years of the Martyrs, and occasionally the *hiğra* calendar. Among the

---

it in an antagonistic manner when referring to Islam as a religious system. Whether or not this interpretation is historically correct with regard to all examples discussed by the author, it is quite unlikely to apply to the Fatimid inscription considered here.

<sup>133</sup> WIET 1942, p. 152-154.

<sup>134</sup> DEN HEIJER 2007, p. 96.

<sup>135</sup> All references to the *History of the Patriarchs of Alexandria* in this paper are given according to the unpublished manuscript Coptic Orthodox Patriarchate Hist. 12, which contains the third part of the primitive redaction of the text. See DEN HEIJER 1985 and DEN HEIJER 1989, p. 14-80. In the present study, the Cairo manuscript in question will be referred to as Ms. C. For the reader's convenience, references to the folios of this manuscript will be followed by those to the edition of the better-known but secondary version, spuriously attributed to the famous 10<sup>th</sup> century author Sawīrus ibn al-Muqaffa', which appears in *HPC* II iii. This later version has traditionally been called "Vulgate", a term challenged by Perrine Pilette who has convincingly demonstrated that numerous later manuscripts are better understood as a diffuse and loosely interrelated mass of text witnesses, see PILETTE 2013; PILETTE 2014; DEN HEIJER 2015, p. 457-459, 475.

church historians who wrote after him, only his immediate successor, Yūḥannā b. Šā'id, used the three calendars in very much the same way.<sup>136</sup>

In his two *Lives* of patriarchs, those of Christodoulos (*Life* 66) and Cyril II (*Life* 67), Mawhūb by no means gives precise dates for all events he reports, but he still provides 48 cases where an event is dated. Such events may be dated only to a year, to a specific month in a year, or to a complete date, including the day (sometimes with indication of the day in the week), the month and the year.

#### 4.2. Events dated to years of the Martyrs

Out of these 48 dated events, 28 are given according to the Coptic calendar of the Martyrs exclusively, without mention of other systems:

1. Consecration of Patriarch Christodoulos: Kiyahk 763.<sup>137</sup>
2. Canons of Patriarch Christodoulos: 8 Misrā 764.<sup>138</sup>
3. Prayer by the monk Basūs: 28 Kiyahk 778.<sup>139</sup>
4. Visit of Cairene and Alexandrian notables to the monasteries of the Wādī al-Naṭrūn: Ṭūba 778.<sup>140</sup>
5. Consecration of two bishops: Tūt 787.<sup>141</sup>
6. Death of Patriarch Christodoulos: 14 Kiyahk 794.<sup>142</sup>
7. Consecration of Patriarch Cyril II: 22 Barmūda 794.<sup>143</sup>
8. Consecration of a bishop for Nubia: 2 Tūt 790 or 797.<sup>144</sup>
9. Two miracles performed by bishop Bimūn: 801.<sup>145</sup>
10. Excommunication of five individuals: 802.<sup>146</sup>
11. Account of relics seen by the author: 803.<sup>147</sup>
12. Death of the bishop of Miṣr (Cairo): 4 Nasī 804.<sup>148</sup>
13. Appointment of a bishop for Jerusalem: 808.<sup>149</sup>
14. Confirmation of a new bishop of Miṣr (Cairo): 19 Bāba [804].<sup>150</sup>
15. Report on a miraculous light: 2 Hātūr, year not mentioned.<sup>151</sup>

---

<sup>136</sup> For entirely practical purposes of presentation, an analysis of Yūḥannā's use of dating systems is excluded from the present paper.

<sup>137</sup> Ms. C 5v6-7 / *HPC* II iii 165.8.

<sup>138</sup> Ms. C 6v8-10 / *HPC* II iii 166.4-5.

<sup>139</sup> Ms. C 34v13-15 / *HPC* II iii 190.15-16.

<sup>140</sup> Ms. C 31v14 / *HPC* II iii 188.3.

<sup>141</sup> Ms. C 28r5-6 / *HPC* II iii 184.17.

<sup>142</sup> Ms. C 54r12-13 / *HPC* II iii 207.7-8. Cf. Ms. C 54v7-8 / *HPC* II iii 208.13-14: "the forty-first year of al-Mustanṣir, in the days of the Amīr al-Ġuyūš (= Badr al-Ġamālī).

<sup>143</sup> Ms. C 56r11-14 / *HPC* II iii 209.11-12.

<sup>144</sup> Ms. C 29r8-9 (790) / *HPC* II iii 185.14-15 (797).

<sup>145</sup> Ms. C 29v16-30r1 / *HPC* II iii 186.9.

<sup>146</sup> Ms. C 60r9-10 / *HPC* II iii 2112.21-22.

<sup>147</sup> Ms. C 5r2-4 / *HPC* II iii 164.1-19.

<sup>148</sup> Ms. C 68v8-9 / *HPC* II iii 220.4.

<sup>149</sup> Ms. C 79r12-14 / *HPC* II iii 229.12-13: "the year of the death of the bishop of al-Balyanā".

<sup>150</sup> Ms. C 69r12-13 / *HPC* II iii 220.15. Like the actual consecration, this was done on a Sunday and the ceremony is presented as a "second consecration".

16. Order of the vizier Al-Yāzūrī to close all churches: 774.<sup>152</sup>
17. Violent extraction of money from the author's brother, Abū al-'Alā' Fahd, and the latter's death, followed by a number of miracle accounts: around 15 Kiyahk 778.<sup>153</sup>
18. Announcement of measures concerning the non-Muslim communities (*dimma*): Kiyahk 802.<sup>154</sup>
19. Execution of a local chief named 'Alī al-Qifī who had filed a false complaint against Patriarch Christodoulos: 860, which must be a scribal error.<sup>155</sup>
20. Syrian (anti-Chalcedonian) Christians attacked by (pro-Chalcedonian) Melkites in Antioch: 783.<sup>156</sup>
21. Arrival of a Synodical Letter from the Patriarch of Antioch to Patriarch Cyril II: Hātūr 795.<sup>157</sup>
22. Arrival of the Armenian Katholikos in Alexandria: Abīb 803.<sup>158</sup>
23. Earthquake in Antioch: 8 Bāba 808.<sup>159</sup>
24. Arrival of the Seljuk conqueror Alp Arslān in Edessa: Bašans [783].<sup>160</sup>
25. Battle of Manzikert: Bāba [783].<sup>161</sup>
26. Rebellion of al-Awḥad, son of vizier Badr al-Ġamālī: Abīb/Baramhāt 802.<sup>162</sup>
27. Capture of of al-Awḥad by his father: Baramhāt 802.<sup>163</sup>
28. Assassination of al-Awḥad, ordered by his father: Abīb 803.<sup>164</sup>

This use of the year of the Martyrs is hardly surprising, of course, in an official history of the Coptic Church. But let us have a closer look at the kind of events that are dated this way.

In 15 cases out of 28 (numbers 1-15) the topic fits into the category of internal Coptic ecclesiastical history. This includes relations with dependant Christian communities outside Egypt, namely, Nubia and Jerusalem. Furthermore, four cases (16-19) involve relations between the Coptic Church, or the Coptic community in general, or individual Copts, and the Fatimid authorities, and six cases (20-25) pertain to the institutional relations with the anti-Chalcedonian sister Churches of Armenia and Syria, or to events that took place in those areas. And finally, three passages out of these 28 (26-28) belong to the realm of the general political history of the Fatimid dynasty, and as such are unrelated to the Coptic community. Admittedly, however, these three passages contain one coherent narrative in which three different moments are dated separately, and on the other hand, this event had an obvious impact on

<sup>151</sup> Ms. C 76r6-7 / *HPC* II iii 226.13-14.

<sup>152</sup> Ms. C 19r15-16 / *HPC* II iii 177.3.

<sup>153</sup> Ms. C 34r2-10 / *HPC* II iii 189.22-190.3.

<sup>154</sup> Ms. C 67r6-7 / *HPC* II iii 218.19-20.

<sup>155</sup> Ms. C 59r4 / *HPC* II iii 211.21.

<sup>156</sup> Ms. C 44r3-4 / *HPC* II iii 198.15.

<sup>157</sup> Ms. C 57v2-3 / *HPC* II iii 210.14.

<sup>158</sup> Ms. C 67v8-9 / *HPC* II iii 219.7.

<sup>159</sup> Ms. C 78v1-2 / *HPC* II iii 228.16-17 (Sunday).

<sup>160</sup> Ms. C 46r11-12 / *HPC* II iii 200.16.

<sup>161</sup> Ms. C 46v3 / *HPC* II iii 200.21.

<sup>162</sup> Ms. C 66r15-66v2 / *HPC* II iii 218-5-7.

<sup>163</sup> Ms. C 66v9-10 / *HPC* II iii 218.11-12 (Friday).

<sup>164</sup> Ms. C 66v13-67r1 / *HPC* II iii 218.14-15: "the last day of Misrā, 803 of the Martyrs (...)" ; the five days of Nasī (...)" ; "in the night of Nayrūz (...)" .



the Coptic urban elite of Alexandria and particularly on Mawhūb, the author, himself who, with his brother Abū al-‘Alā’ Fahd, had collaborated closely with the rebel *amīr*.<sup>165</sup>

#### 4.3. Events dated to *ḥarāğ* years

In nine cases Mawhūb uses only the *ḥarāğ* calendar in order to date the events he describes:

29. First Palm Sunday procession in Alexandria after it had been banned by the authorities: 444.<sup>166</sup>
30. Implementation of vizier al-Yāzūrī’s order to close all churches: 446.<sup>167</sup>
31. Opening of churches after they had been closed: 447.<sup>168</sup>
32. Bishops summoned by Badr al-Ġamālī: Amšīr 478.<sup>169</sup>
33. Patriarch Cyril II and bishops summoned again by Badr al-Ġamālī: 22 [Amšīr 478].<sup>170</sup>
34. Encounter between Cyril II, bishops and Badr al-Ġamālī: 27 Amšīr [478].<sup>171</sup>
35. Sighting of two comets: Barmūda 453.<sup>172</sup>
36. High rise of the Nile; end of the Great Crisis (*al-šidda al-‘uḡmā*): 462.<sup>173</sup>
37. Attempt by the Seljuks to invade Egypt: 466.<sup>174</sup>

Out of these, six passages (29-34) belong to the category of relations between the Coptic Church, or the Coptic community in general, or individual Copts, and the Fatimid authorities. This is actually two more than the four passages of a similar content that are dated according to the Coptic calendar only. Three passages (35-37) could be labeled as referring to general, non-confessional history, pertaining to either natural phenomena with social and economic implications (35 and 39), or a military and geopolitical issue (37).

Thus, for the moment we can state that Mawhūb uses the *ḥarāğ* calendar in a way that partly overlaps with the years of the Martyrs, but that he does not use it for internal Coptic affairs. This division is somewhat blurred, however, or at least complicated, by the instances where Mawhūb combines the datation systems that were available to him.

#### 4.4. Events dated to years of the Martyrs and to *ḥarāğ* years

In five cases, Mawhūb indicates the Coptic month, but followed by the year according to both the calendar of the Martyrs and that of the *ḥarāğ* (out of the total of 48 dated events):

38. Speech by Badr al-Ġamālī to Cyril II and the bishops: 23 Misrā 802/475.<sup>175</sup>

<sup>165</sup> See DEN HEIJER 2008, p. 180-181.

<sup>166</sup> Ms. C 22v16-23r1 / HPC II iii 180.4-5.

<sup>167</sup> Ms. C 43v9-11 / HPC II iii 198.7-10.

<sup>168</sup> Ms. C 43v9-11 / HPC II iii 198.7-10.

<sup>169</sup> Ms. C 69r14-15 / HPC II iii 220.16-17 (in the latter without the name of the month).

<sup>170</sup> Ms. C 69v1-2 (“the twenty-second of it”) / HPC II iii 222.18 (in the translation, p. 347, the editors add “(the month of Bābah”).

<sup>171</sup> Ms. C 71r9-14 / HPC II iii 222.7-9 (Wednesday).

<sup>172</sup> Ms. C 24v11-12 / HPC II iii 181.17.

<sup>173</sup> Ms. C 50r6 / HPC II iii 203.19.

<sup>174</sup> Ms. C 67r13-14 / HPC II iii 218.24.

<sup>175</sup> Ms. C 63r1-3 / HPC II iii 215.5-7 (Saturday).

39. Execution of Badr al-Ġamālī's superintendant Yūsīb, who had humiliated Cyril II: 30 Misrā [802]/[475].<sup>176</sup>
40. Consecration of the abovementioned new bishop of Miṣr (Cairo): 12 Bāba [804].<sup>177</sup>
41. Autobiographical note by Mawhūb, the author, involving a treasurer called Abū l-Ḥārīt: 29 Baramhāt 480/807.<sup>178</sup>
42. Victorious outcome of Badr al-Ġamālī's campaign against anti-Fatimid rebels: Hātūr 463/790.<sup>179</sup>

The order in which the two dating systems are used here does not seem to be of relevance: in three cases (38-40) the Years of the Martyrs is followed by *ḥarāġ* year while the opposite is true for the latter two cases (41 and 42). In terms of content, three of these cases (38, 39 and 41) and once more belong to our category of Coptic relations with the Fatimid authorities, one event (40) is related to internal Coptic history, and one event (42) concerns general or military history: this is Mawhūb's account of Badr al-Ġamālī's arrival and Egypt and his suppression of the Sunnite anti-Fatimid rebels that had destabilized the country and had seriously threatened the Ismaili Fatimid Caliphate.

#### 4.5. Events dated to lunar years

In six cases, Mawhūb dates events to Islamic years, which, significantly, are not referred to as years of the *hiġra*, but rather with the adjective *al-hilāliyya* "lunar" already encountered above (3.2) Out of these, two events are dated exclusively to the Islamic years:

43. Birth year of Caliph al-Mustanṣir: 420.<sup>180</sup>
44. A prediction of future events: 485.<sup>181</sup>

In the first passage (43), the motivation for this choice is quite obvious: here, Mawhūb mentions the date of birth of the imam-caliph, al-Mustanṣir Billāh, in his main introduction, in which he otherwise explains the editorial process of compiling the earlier parts of the *HPA* and of his own additions to it. The other one (44) is more difficult to account for. It concerns a vague reference to a book of predictions, perhaps of apocalyptic or eschatological nature, and possibly written by a Muslim author. Since the author's specifically Islamic identity is not stressed in any kind of way, however, this passage may well be understood as pertaining to general history.

In two cases, the *hiġra* and *ḥarāġ* calendars are used side by side:

45. Beginning of al-Mustanṣir's rule: 15 Ša'bān 427/ Barmūda 425.<sup>182</sup>
46. Assassination of the anti-Fatimid rebel leader Nāṣir al-Dawla b. Ḥamdān: 465/462.<sup>183</sup>

<sup>176</sup> Ms. C 64r.4 / *HPC* II iii 216.2-3 (Saturday, the last day of Misrā).

<sup>177</sup> Ms. C 69r.9-11 / *HPC* II iii 220.13-14 (Sunday).

<sup>178</sup> Ms. C 73r.3-5 / *HPC* II iii 223.19-20 (Monday). Ms. C is corrupt here: "84 *ḥarāġiyya*", with omission of *mi'a* "hundred" which is correct in the mss. used by *HPC*; only Ms. C, however, adds the year of the Martyrs, equally corrupted into "78", which, by once again adding *mi'a*, can be restored into "807" (= 1091 CE).

<sup>179</sup> Ms. C 50r.11-14 / *HPC* II iii 203.22-24.

<sup>180</sup> Ms. C 2r.6-8 *HPC* II ii 160.8-9. This passage belongs to Mawhūb's preface, in which he explains his editorial work.

<sup>181</sup> Ms. C 78v.8-9 / *HPC* II iii 229.1.

<sup>182</sup> Ms. C 2r.8-11 / *HPC* II ii 160.9-11. Also in Mawhūb's preface; "The length of his reign was fifty-one *ḥarāġ* years" (Ms. C 2r.5-6 / *HPC* II ii 160.8).

<sup>183</sup> Ms. C 51r.2-4 / *HPC* II iii 204.14-15.

Both passages concern Fatimid political history. Finally, two passages are dated according to all three systems: Martyrs, *ḥarāğ* and *hiğra* years (in this order):

47. Tenth year of Cyril II's patriarchate and beginning of preparation of the Arabic text of the *History of the Patriarchs of Alexandria* by Mawhūb b. Maṣṣūr b. Mufarriğ, in the monastery of Saint Macarius: Barmūda 804/480/476.<sup>184</sup>
48. Death of patriarch Cyril II: 12 Barmūda 808/30 rabi' II 485/481.<sup>185</sup>

The first of these two passages (47), which appears in the introduction by Mawhūb mentioned earlier on, does not fit into any of the categories used above. Rather, it belongs to a separate category, that of redactional notes. The fact that this note stands at the beginning of Mawhūb's text may explain why he chose to use all three calendars to refer to the starting point of his quest for sources and his project of codifying the official history of his Church, with the personal approval of patriarch Cyril II. For, it should be remembered, it was Mawhūb who collected these sources, who produced their translation into Arabic and who compiled them in the coherent Arabic text that we now know as the *History of the Patriarchs*.<sup>186</sup>

## 5. Conclusion

Some 60 % of the dated events in Mawhūb's two *Lives* of Patriarchs are given according to the Coptic calendar of the Martyrs exclusively, and belong to internal ecclesiastical history or, in four cases, to the history of relations between the Coptic community and the Fatimid authorities. While this is hardly surprising in what is after all a part of the official history of the Coptic Church, it is nevertheless interesting to note that in nearly all other cases (almost 40 %) Mawhūb uses the *ḥarāğ* calendar, either on its own or combined with that of the Martyrs and/or the *hiğra*. Most passages dealing with Coptic-Fatimid authorities are actually dated in this way.

In brief, Mawhūb's use of the three available dating systems is not totally systematic, but some kind of logic does seem to operate at the background and the *ḥarāğ* year is a relatively prominent feature of his way of dating events. Theoretically, this impression could tempt one to think of the use of the *ḥarāğ* year outside the domains of finance, taxation, trade and administration as a typical Coptic phenomenon. Such an idea does not make much sense, however, if one is to accept the definition of the *ḥarāğ* year as an "Islamic adaptation" of the Coptic year. Moreover, we have seen that al-Maḥzūmī states that in 501 A.H., the conversion of the *ḥarāğ* year 499 into 501 was ordered, a measure that was tantamount to abolishing the *ḥarāğ* calendar as a distinct chronographical device: in the official decree quoted *in extenso* by al-Maqrīzī after al-Maḥzūmī,<sup>187</sup> it is stated that this order should be announced in all *dīwāns*. Therefore, it stands to reason that the use of this dating system was very widespread indeed in the period in question, and that it must have been much more commonly used than within the Coptic community alone.

To be sure, this analysis has been limited to *Lives* 66 and 67 of the *History of the Patriarchs of Alexandria*, and ought to be extended to the other part of this corpus that makes use of the *ḥarāğ* year, namely, the *Lives* written by Mawhūb's immediate continuator Yūḥannā b.

<sup>184</sup> Ms. C 1v7-11 / HPC II iii 160.1-3.

<sup>185</sup> Ms. C 82r1-4 / HPC II iii 232.2-3 (Sunday): "the *salḥ* of Rabī' al-ṭānī."

<sup>186</sup> See above, section 4.1.

<sup>187</sup> AL-MAQRĪZĪ, *al-Ḥiṭaṭ*, 1, p. 756-757.

Ṣā'id,<sup>188</sup> which, incidentally, contains an interesting note on the abovementioned adjustment under al-Afdal, in 501 AH, presented rather as an order to abolish the *ḥarāğ* year.<sup>189</sup> Additionally, other Copto-Arabic historiographical texts would need to be taken into consideration.<sup>190</sup>

As for other sources discussed in this paper, the examples quoted or referred to above are obviously too scanty to allow for systematic conclusions on the use of the *ḥarāğ* year, or indeed of the "Islamic solar year" where it appears without explicit mention of this term. A complete survey of all accessible documents would be needed to corroborate, invalidate or fine-tune the tentative observations made here. Whereas the later, post-Fatimid literary sources show that Coptic months could very well be combined with Islamic lunar years, it seems fairly safe to contend that the earlier, third/ninth documents such as the ones discussed here are more ambiguous and could be read as implicitly dated either to the *hiğra* year or indeed to the "Islamic solar year", whatever it may have been called at the time. Whether or not the early expression *sanat qaḍā' al-mu'minīn* pertains to such a lunisolar year remains undecided: there is clearly no positive proof that it did, but that does not necessarily mean that such cannot possibly have been the case.

It also seems clear that the use of the *ḥarāğ* dating system became more extensive over the years and culminated in the Fatimid period, due to its official status as pointed out above. Whereas the implicit and uncertain examples from the colophons of a Coptic manuscript and from a monumental Arabic inscription, if interpreted correctly, seem to be rather exceptional, Coptic historiography provides ample evidence of the simultaneous use of the various coexisting dating systems, including that of the *ḥarāğ* year. Such data would require further scrutiny and comparison with other types of narrative sources and treatises on chronography, not only pertaining to Egypt but also to other parts of the Arab and Islamicate world.

---

<sup>188</sup> Hopefully, this will be done in a shorter sequel to the present article.

<sup>189</sup> Ms. C 106r1-9 / *HPC* III i, p. 4-5.

<sup>190</sup> Cf. the survey in DEN HEIJER 1996.

**BIBLIOGRAPHY****1. Edited Arabic documents**<sup>191</sup>

- Chrest.Khoury I = KHOURY, GROHMANN 1993.  
 Chrest.Khoury II = KHOURY, GROHMANN 1995.  
 CPR XXI = FRANTZ-MURPHY 2001.  
 CPR XXVI = THUNG 2006.  
 P.Alqab = MUĠĀWIRĪ MUḤAMMAD 2000-2002.  
 P.CahenRagibDette = CAHEN, RĀĠIB 1977.  
 P.Cair.Arab. = GROHMANN 1934-1962.  
 P.Fay.Villages = GAUBERT, MOUTON 2014 .  
 P.GenizahCambr. = KHAN 1993.  
 P.GrohmannFatimidenerlas = GROHMANN 1957.  
 P.KölnKauf. = DIEM 2004.  
 P.Philad.Arab. = LEVI DELLA VIDA 1981.  
 P.Prag.Arab. = GROHMANN 1938-1943.  
 P.RagibQalamun = RĀĠIB 1995.  
 P.RagibJurisdiction = RĀĠIB 2007.  
 P.Steuerquittungen = DIEM 2008.  
 P.ThungWrittenObligations = THUNG 1996.  
 P.TillierDebts = TILLIER, VANTHIEGEM 2019.  
 P.VanthieghemLocation 1 = VANTHIEGHEM 2013 .  
 P.World 1 = GROHMANN 1952.  
 P.YounesAcknowledgment = YOUNES 2016.  
 PERF = KARABACEK 1894.

---

<sup>191</sup> Most of these documents are Arabic papyri, but one text is written on parchment and several are on paper. As a compromise between the recommendations of the International Society for Arabic Papyrology (ISAP) and the BABELAO style sheet, the abbreviations of the Arabic Papyrology Database (ADP) are given here, with reference to the abbreviated titles of the publications listed below (3. *Tools and studies*). The inventory numbers, added (between brackets) in the footnotes, are not explained here; the corresponding full titles can be easily retrieved via the ADP. In the present article, references to documents include the ADP abbreviations explained here, usually followed by the document number but sometimes by a page number, which is indicated as such (consequently, any reference lacking the abbreviation “p.” for page number refers to the number of a published document).

## 2. *Literary sources*<sup>192</sup>

AL-‘ABBĀSĪ AL-ŞAFADĪ, *Nuzhat al-Mālik wa-l-Mulūk* = AL-‘ABBĀSĪ AL-ŞAFADĪ, *Nuzhat al-Mālik wa-l-Mulūk fī Muḥtaşar Sīrat man waliya Mişr min al- Mulūk*, ed. ‘U.‘A. TADMURĪ, Bayrūt, 1424/2003.

‘ABD AL-LAṬĪF AL-BAĠDĀDĪ, *al-Ifāda* = ‘ABD AL-LAṬĪF AL-BAĠDĀDĪ, *al-Ifāda wa l-I‘tibār fī l-Umūr al-Muşāhada wa l-Ḥawādiṭ al-Mu‘āyana bi-Arḍ Mişr*, ed. al-Qāhira, 1869.

ABŪ AL-FIDĀ’, *al-Muḥtaşar* = ABŪ AL-FIDĀ’, *al-Muḥtaşar min Aḥbār al-Başar*, ed. al-Qāhira, s.d.

AL-BATTĀNĪ, *Ziğ al-Şābi’* = AL-BATTĀNĪ, *Ziğ al-Şābi’*, ed. al-Maktaba al-Şāmila (<https://al-maktaba.org/book/452>, last accessed 02/09/2021).

AL-ĠĀBARTĪ, *‘Ağā’ib al-Ātār* = AL-ĠĀBARTĪ, *‘Ağā’ib al-Ātār fī al-Tarāğim wa-l-Aḥbār*, ed. Bayrūt, s.d.

*HPC* II iii = *History of the Patriarchs of the Egyptian Church, known as the History of the Holy Church, by Sawirus Ibn al-Muḳaffa’, bishop of al-Aşmūnīn*, Vol. 2, part 3, ed./transl. A.S. ATIYA, Y. ‘ABD AL-MASĪH, O.H.E. KHS-BURMESTER (Publications de la Société d’Archéologie Copte. Textes et Documents, 3), Le Caire, 1959.

*HPC* III i = *History of the Patriarchs of the Egyptian Church, known as the History of the Holy Church, by Sawirus Ibn al-Muḳaffa’, bishop of al-Aşmūnīn*, Vol. 3, part 1, ed./transl. A. KHATER, O.H.E. KHS-BURMESTER (Publications de la Société d’Archéologie Copte. Textes et Documents, 12), Le Caire, 1970.

IBN ‘ABD AL-ḤAKAM, *Futūḥ Mişr* = IBN ‘ABD AL-ḤAKAM, *Futūḥ Mişr wa-Aḥbāruhā*, ed. C.C. TORREY, New Haven, 1922.

IBN ‘ABD AL-ḤAQQ, *Marāşid al-Iṭṭilā’* = IBN ‘ABD AL-ḤAQQ, *Marāşid al-Iṭṭilā’ ‘alā Asmā’ al-Imkina wa-l-Biqā’*, ed. Bayrūt, 1412 [1991].

IBN AL-DAWĀDĀRĪ, *Kanz al-Durar* = IBN AL-DAWĀDĀRĪ, *Kanz al-Durar wa-Ġāmi’ al-Ġurar/Die Chronik des Ibn ad- Dawādārī*, 1, ed. B. RADTKE, E. BADEEN, M.S. ĠAMĀL AL-DĪN, G. GRAF, E. GLASSEN, D. KRAWULSKY, Ş. AL-MUNAĠĠID, S.‘A. ‘ĀŞŪR, U. HAARMANN, H.R. ROEMER, Kairo, 1960-1994.

IBN ḤAĠAR, *Inbā’ al-Ġumr* = IBN ḤAĠAR AL-‘ASQALĀNĪ, *Inbā’ al-Ġumr bi-Anbā’ al-‘Umr*, ed. Ḥ. Ḥabaşī, al-Qāhira, 1389/1969.

IBN ḤAWQAL, *Şūrat al-Arḍ* = IBN ḤAWQAL, *Şūrat al-Arḍ*, ed. M.J. DE GOEJE, Leiden, 1873.

IBN TAĠRĪ BIRDĪ, *Ḥawādiṭ al-Duhūr* = IBN TAĠRĪ BIRDĪ, *Ḥawādiṭ al-Duhūr fī Madā al-Ayyām wa-l-Şuhūr*, ed. M.K. ‘IZZ AL-DĪN, [al-Qāhira], 1410/1990.

AL-KINDĪ, *Kitāb al-Quḍāt* = AL-KINDĪ, *Kitāb al-Wulāt Kitāb al-Quḍāt*, ed. M.Ḥ. ISMĀ‘İL, A.F. AL-MAZĪDĪ, Bayrūt, 1424/2003.

AL-MAḤZŪMĪ, *al-Minhāğ* = AL-MAḤZŪMĪ, *Kitāb al-Minhāğ fī ‘Ilm Ḥarāğ Mişr*, ed. C. CAHEN, Y. RĀGIB, Le Caire, 1986.

---

<sup>192</sup> The references to Arabic literary sources follow an author – short title format except those to the *History of the Patriarchs of Alexandria* (see below, *HPE* II ii, *HPE* II iii and Ms. C). The definite article *al-* preceding many Arab names is not accounted for alphabetically.

- AL-MAQRĪZĪ, *al-Sulūk* = AL-MAQRĪZĪ, *al-Sulūk li-Ma'rifat Duwal al-Mulūk*, ed. M. 'A. 'ATĀ, Bayrūt, 1418/1997.
- AL-MAQRĪZĪ, *al-Ḥiṭaṭ* = AL-MAQRĪZĪ, *al-Mawā'iz wa-l-I'tibār fī Dīkr al-Ḥiṭaṭ wa-l-Āṭār*, ed. A.F. SAYYID, London, 1422/2002-1423-2003.
- AL-MAS'ŪDĪ, *al-Tanbīh wa-l-Isrāf* = AL-MAS'ŪDĪ, *al-Tanbīh wa-l-Isrāf*, ed. 'A.I. AL-ṢĀWĪ, al-Qāhira, s.d.
- Ms. C = Ms. Coptic Orthodox Patriarchate, Cairo, Hist. 12, containing the third part of the (unpublished) primitive recension of the *History of the Patriarchs of the Patriarchs of Alexandria* (cf. the editions *HPC* II iii and *HPC* III i, see alphabetically).
- AL-NAWAWĪ, *al-Mağmū' Šarḥ al-Muḥaḍḍab*, ed. Bayrūt, 1421[/2000].
- AL-NUWAYRĪ, *Nihāyat al-Arab* = AL-NUWAYRĪ, *Nihāyat al-Arab fī Funūn al-Adab*, ed. al-Qāhira, 1423 [/2002].
- AL-QALQAŠANDĪ, *Šubḥ al-A 'šā* = AL-QALQAŠANDĪ, *Šubḥ al-A 'šā fī Šinā'at al-Inšā'*, ed. M.Ḥ. ŠAMS AL-DĪN, Bayrūt, 2012.
- AL-ṢAFADĪ, *A 'yān al-'Aṣr* = AL-ṢAFADĪ, *A 'yān al-'Aṣr wa-A 'wān al-Naṣr*, ed. 'A. ABŪ ZAYD, N. ABŪ 'AMŠA, M. MAW'ID, M.S. MUḤAMMAD, Bayrūt, Dimašq, 1418/1998.
- AL-TĪFĀŠĪ, *Surūr al-Nafs* = AL-TĪFĀŠĪ, *Surūr al-Nafs bi-Midrāk al-Ḥawāss al-Ḥams*, ed. I. 'ABBĀS, Bayrūt, 1980.
- AL-YA'QŪBĪ, *Kitāb al-Buldān* = AL-YA'QŪBĪ, *Kitāb al-Buldān*, ed. Bayrūt, 1422 [/2001].
- YĀQŪT, *Mu'ğam al-Buldān* = YĀQŪT, *Mu'ğam al-Buldān*, ed. Bayrūt, 1995.

### 3. Tools and Studies

- BADAWI, E.M., HINDS, M., 1986: *A Dictionary of Egyptian Arabic*, Beirut.
- BECKER, C.H., 1910 : “Zur Kulturgeschichte Nordsyriens im Zeitalter der Mamluken”, *Der Islam* 1, p. 93-100.
- BONNEAU, D., 1964: *La crue du Nil, divinité égyptienne, à travers mille ans d'histoire (332 av. – 641 ap. J.-C.)*, Paris.
- BOOTH, P., 2013: “The Muslim Conquest of Egypt reconsidered”, in C. ZUCKERMAN (ed.), *Constructing the Seventh Century* (Travaux et Mémoires, 17), Paris, p. 639-670.
- 2016: “The Last Years of Cyrus, Patriarch of Alexandria († 642)”, in J.-L. FOURNET, A. PAPAConstantinou (ed.), *Mélanges Jean Gascou. Textes et études papyrologiques (P.Gascou)* (Travaux et Mémoires, 20/1), Paris, p. 509-558.
- BRUNING, J., 2015: “A Legal Sunna in *Dhikr Ḥaqqs* from Sufyanid Egypt”, *Islamic Law and Society* 22, p. 352-374.
- CAHEN, C., 1974: “L'administration financière de l'armée fatimide d'après al-Makhzūmī”, *Journal of the Economic and Social History of the Orient* 15, p. 163-182.
- 1978: “Kharādj, I. – Islam classique” in E. VAN DONZEL, B. LEWIS, CH. PELLAT, C. DUMONT, G.R. HAWTING, M. PATERSON, C.E. BOSWORTH, F.TH. DIJKEMA, C. LEFORT, S. NURIT (ed.), *Encyclopédie de l'Islam*, Nouvelle édition, Vol. 4, Leyde, Paris, p. 1062-1066.

- CAHEN, C., RĀĠIB, Y., 1977: “Une reconnaissance de dette en 389h.-999 J. C. (papier arabe Strasbourg 118)”, *Cahier d'Études Arabes et Islamiques* 2-3, p. 23-28.
- CASSON, L., 1938: “Tax Collection Problems in Early Arab Egypt”, *Transactions of the American Philological Association* 69, p. 274-291.
- COOPER, R.S., 1976: “The Assessment and Collection of Kharaj Tax in Medieval Egypt”, *Journal of the American Oriental Society* 96, p. 365-382.
- DE BLOIS, F.C., 2000: “Ta’rīkh. I. Dates and Eras in the Islamic World. 1. In the sense of “date, dating”, etc.”, in P.J. BEARMAN, TH. BIANQUIS, C.E. BOSWORTH, E. VAN DONZEL, W.P. HEINRICHS (ed.), *The Encyclopaedia of Islam*, New Edition, Vol. 10, Leiden.
- DE BOER, T.J., 1934: “Zamān”, in M. TH. HOUTSMA, A.J. WENSINCK, W. HEFFENING, H.A.R. GIBB, E. LÉVI-PROVENÇAL (ed.), *Enzyklopaedie des Islam*, Vol. 4, Leiden, Leipzig.
- DELATTRE, A., MARTIN, A., VANTHIEGHEM, N., 2016: “Papyrologica III”, *Chronique d'Égypte* 91, p. 211-224.
- DEN HEIJER, J., 1985: “L’Histoire des Patriarches d’Alexandrie, recension primitive et Vulgate”, *Bulletin de la Société d’Archéologie Copte* 27, p. 1-29.
- 1989: *Mawhūb Ibn Manṣūr Ibn Mufarriġ et la rédaction du texte arabe de l’Histoire des Patriarches d’Alexandrie* (Corpus Scriptorum Christianorum Orientalium, 513; Subsidia, 81), Leuven.
- 1996: “Coptic Historiography in the Fāṭimid, Ayyūbid and Early Mamlūk Periods”, *Medieval Encounters. Jewish, Christian and Muslim Culture in Confluence and Dialogue* 2, p. 67-98.
- 2007: “Le vizir fatimide Badr al-Ġamālī (466/1074-487/1094) et la nouvelle muraille du Caire: quelques remarques preliminaries”, in U. VERMEULEN, K. D’HULSTER (ed.), *Egypt and Syria in the Fatimid, Ayyubid and Mamluk Eras V* (Orientalia Lovaniensia Analecta, 169), Leuven, p. 91-107.
- 2008: “La rébellion de l’émir Al-Awḥad (477/1084) : étude comparative des sources historiques” in J.-Y. EMPEREUR, C. DÉCOBERT (ed.), *Alexandrie Médiévale* 3 (Études Alexandrines, 16), Le Caire, p. 171-181.
- 2012: “Introduction: Middle and Mixed Arabic, a new trend in Arabic Studies”, in L. ZACK, A. SCHIPPERS (ed.), *Mixed Arabic: Diachrony and Synchrony*, Leiden, Boston, p. 1-25.
- 2015: “The Martyrdom of Bifām Ibn Baqūra al-Ṣawwāf by Mawhūb ibn Manṣūr ibn Mufarrij and its Fatimid background”, in M.M. SHENODA, J. DEN HEIJER, Y. LEV, M.N. SWANSON (ed.), *Non-Muslim Communities in Fatimid Egypt (10<sup>th</sup>-12<sup>th</sup> centuries CE)* (Medieval Encounters, 21, 4-5), Leiden, p. 452-484.
- 2020: review of TILLIER 2017, *Le Muséon* 133, p. 250-253.
- DEN HEIJER, J., LEV, Y., SWANSON, M.N., 2015: “Introduction. The Fatimid Empire and its Population”, in M.M. SHENODA, J. DEN HEIJER, Y. LEV, M.N. SWANSON (ed.), *Non-Muslim Communities in Fatimid Egypt (10<sup>th</sup>-12<sup>th</sup> centuries CE)* (Medieval Encounters, 21, 4-5), Leiden, p. 323-344.
- DIEM, W., 2004: *Eine arabische Kaufurkunde von 1024 n. Chr. aus Ägypten: Aus der Sammlung der Max-Freiherr-von-Oppenheim-Stiftung* (Schriften der Max-Freiherr-von-Oppenheim-Stiftung, 16), Wiesbaden.



- 2006: “Philologisches zu arabischen Steuerquittungen aus Ägypten (8.-11. Jahrhundert)”, *Wiener Zeitschrift für die Kunde des Morgenlandes* 96, p. 55–111.
- 2008: *Arabische Steuerquittungen des 8. bis 11. Jahrhunderts: Aus der Heidelberger Papyrussammlung und anderen Sammlungen* (Documenta Arabica antiqua, 5). Wiesbaden.
- 2011: “Zwischen hohem Stil und Vulgarismus: Ein Brief aus den Ägypten des 10.-11. Jahrhunderts n. Chr.”, in J. DEN HEIJER, P. LA SPISA, L. TUERLINCKX (ed.), *Autour de la langue arabe. Études présentées à Jacques Grand’Henry à l’occasion de son 70<sup>e</sup> anniversaire*, Louvain-la-Neuve, 2011 (Publications de l’Institut Orientaliste de Louvain, 61), p. 155-188.
- DONNER, F., 2010: *Muhammad and the Believers: At the Origins of Islam*. Cambridge.
- DU BOURGUET, P., 1983: “Le mot ‘copte’”, *Bulletin de la Société d’Archéologie Copte* 25, p. 101-106.
- DUCÈNE, J.-C., 2017: “Ibn Ḥawqal”, in K. FLEET, G. KRÄMER, D. MATRINGE, J. NAWAS, E. ROWSON (ed.), *Encyclopaedia of Islam, THREE*, [http://dx.doi.org/10.1163/1573-3912\\_ei3\\_COM\\_30810](http://dx.doi.org/10.1163/1573-3912_ei3_COM_30810).
- FRANTZ-MURPHY, G., 1986: *The Agrarian Administration of Egypt from the Arabs to the Ottomans* (Suppléments aux Annales Islamologiques, Cahier N° 9), Le Caire.
- 2001: *Arabic agricultural leases and tax receipts from Egypt 148 - 427 A.H./765 - 1035 A.D.* (Corpus Papyrorum Raineri, 21), Wien.
- FISCHER, W., JASTROW, O., 1980: *Handbuch der arabischen Dialekte* (Porta Linguarum Orientalium, Neue Serie, 16), Wiesbaden.
- GABRIELI, F., 1960: “Adjam”, in H.A.R. GIBB, J.H. KRAMERS, E. LÉVI-PROVENÇAL, J. SCHACHT, S.M. STERN, B. LEWIS, CH. PELLAT, C. DUMONT, R. SAVORY (ed.), *Encyclopédie de l’Islam*, Nouvelle édition, Vol. 1, Leyde, Paris, 1960, p. 212.
- GAUBERT, C., MOUTON, J.-M., 2014: *Hommes et villages du Fayyout dans la documentation papyrologique arabe (Xe-XIe siècles): avec une introduction archéologique de Włodzimirz Godlewski* (Hautes études orientales. Moyen et Proche-Orient, 52), Genève.
- GROHMANN, A., 1934-1962: *Arabic Papyri in the Egyptian Library*, Cairo.
- 1938-1943: “Arabische Papyri aus der Sammlung Carl Wessely im Orientalischen Institute zu Prag”, *Archiv Orientální* 10, p. 149-162; 11, p. 242-289; 12, p. 1-112; 13, p. 161-260.
- 1952: *From the World of Arabic papyri*, Cairo.
- 1957: “Ein Fāṭimidenerlass vom Jahre 415 A. H. (1024 A. D.) im Koptischen Museum in Alt-Kairo”, *Rivista degli studi orientali* 23, p. 641–654.
- 1966: (mit Beiträgen von Joachim MAYR und Walter C. TILL), *I Arabische Chronologie. II Arabische Papyruskunde* (Handbuch der Orientalistik. Der Nahe und der Mittlere Osten. Ergänzungsband II, Erster Halbband), Leiden.
- HALM, H., 1979-1982: *Ägypten nach den mamlukischen Lehensregistern*, I-II (Beihefte zum Tübinger Atlas des Vorderen Orients, Reihe B, Geisteswissenschaften, No. 38/1-2), Wiesbaden.
- 2003: *Die Kalifen von Kairo. Die Fatimiden in Ägypten 973–1074*, München.

- 2007: “Badr al- Ġamālī – Wesir oder Militärdiktator”, in U. VERMEULEN, K. D’HULSTER (ed.), *Egypt and Syria in the Fatimid, Ayyubid and Mamluk Eras V* (Orientalia Lovaniensia Analecta, 169), Leuven, p. 121-127.
- 2014: *Kalifen und Assasinen. Ägypten und der Vordere Orient zur Zeit der ersten Kreuzzüge 1074-1171*, München.
- HIRSCHFELD, Y., SOLAR, G., 1981: “The Roman Thermae at Ḥammāt Gader: Preliminary Report of Three Seasons of Excavations”, *Israel Exploration Journal* 31, p. 197-219.
- HOPKINS, S., 1984: *Studies in the Grammar of Early Arabic, based upon papyri datable to before A.H. 300/A.D. 912* (London Oriental Series, 37), Oxford.
- HOYLAND, R.G., 2015: *In God’s Path. The Arab Conquests and the Creation of an Islamic Empire*, Oxford, New York.
- HUMPHREYS, R.S., 1992: *Islamic History, A Framework for Inquiry*, revised edition, Cairo.
- KARABACEK, J. VON, 1894: *Papyrus Erzherzog Rainer: Führer durch die Ausstellung; mit 20 Tafel- und 90 Textbildern*, Wien.
- KHAN, G., 1993: *Arabic Legal and Administrative Documents in the Cambridge Genizah Collections* (Cambridge Library Genizah Series, 10), Cambridge.
- KHOURY, R.G., GROHMANN, A., 1993: *Chrestomathie de papyrologie arabe: Documents relatifs à la vie privée, sociale et administrative dans les premiers siècles islamiques* (Handbuch der Orientalistik. Der Nahe und der Mittlere Osten. Ergänzungsband II, Zweiter Halbband), Leiden.
- 1995 : *Papyrologische Studien: Zum privaten und gesellschaftlichen Leben in den ersten islamischen Jahrhunderten* (Codices Arabici Antiqui, 5), Wiesbaden.
- KOSACK, W., 2012: *Der koptische Heiligenkalender. Deutsch – Koptisch – Arabisch nach den besten Quellen neu bearbeitet und vollständig herausgegeben mit Index Sanctorum koptischer Heiliger, Index der Namen auf Koptisch, Koptische Patriarchenliste, Geografische Liste*, Berlin.
- KRAEMER, C.J., 1958: *Excavations at Nessana*, vol. 3: *Non-Literary Papyri*, Princeton.
- LEVI DELLA VIDA, G., 1981: *Arabic Papyri in the University Museum in Philadelphia, Pennsylvania* (Atti della Accademia Nazionale dei Lincei 378. Memorie Classe di science morali, storiche e filologiche Serie VIII, 25,1), Rome.
- LEVY-RUBIN, M., 2003: “Praise or Defamation? On the Polemic Usage of the Term *ḥanīf* among Christians and Muslims in the Middle Ages”, *Jerusalem Studies in Arabic and Islam* 28, p. 202–224.
- LOUCA, A., 1981: “Le moment inaugurateur en histoire. Analyse d’un texte d’Ibn ‘Abd al-Ḥakam (187-257 H./803-871) sur la conquête musulmane de l’Égypte”, in R. PETERS (ed.), *Proceedings of the Ninth Congress of the Union Européenne des Arabisants et Islamisants* (Publications of the Netherlands institute of archaeology and Arabic studies in Cairo, 4), Leiden, p. 181-192.
- MELCHERT, C., 2018: review of TILLIER 2017, *Bulletin critique des Annales Islamologiques* 32, p. 42-43.
- MIKHAIL, M.S.A., 2016: *From Byzantine to Islamic Egypt. Religion, Identity and Politics after the Arab Conquest*, London, New York.

- MIQUEL, A., 1971: "Ibn Hawḳal", in B. LEWIS, V.L. MÉNAGE, CH. PELLAT, J. SCHACHT, C. DUMONT, E. VAN DONZEL, G.R. HAWTING (ed.), *Encyclopédie de l'Islam*, Nouvelle édition, Vol. 3, Leyde, Paris, p. 786-788.
- MONTGOMERY WATT, W., 1971: "Hidjra", in B. LEWIS, V.L. MÉNAGE, CH. PELLAT, J. SCHACHT, C. DUMONT, E. VAN DONZEL, G.R. HAWTING (ed.), *Encyclopaedia of Islam*, New Edition, Vol. 3, Leiden, London, 1971, p. 366-367.
- AL-MUDARRIS, A., 2008: *Papyrologische Untersuchungen zur arabischen Diplomatie anhand von Eheurkunden aus den ersten islamischen Jahrhunderten* (Codices Arabici Antiqui, 10), Wiesbaden.
- MUGĀWIRĪ MUḤAMMAD, S., 2000-2002: *al-Alqāb wa-asmā' al-ḥiraf wa-l-wazā'if fī daw' al-bardiyyāt al-'arabiyya*, 3 vols., Cairo.
- PELLAT, Ch., 1986: *Cinq calendriers égyptiens* (Textes arabes et études islamiques, 26), Le Caire.
- PILETTE, P., 2013: "L'Histoire des Patriarches d'Alexandrie : une nouvelle évaluation de la configuration du texte en recensions," *Le Muséon* 126, 419-450.
- 2014: *L'Histoire des Patriarches d'Alexandrie : une tradition textuelle ouverte. Essai méthodologique, édition critique et traduction des Vies 17 à 26*, Ph. D. thesis, Université catholique de Louvain (publication forthcoming).
- RABIE, H., 1972: *The financial System of Egypt, A.H. 564-741/ A.D. 1169-1341* (London Oriental Series, 25), London-New York-Toronto.
- 1981: "Some Technical Aspects of Agriculture in Medieval Egypt", in A.L. UDOVITCH (ed.), *The Islamic Middle East, 700-1900: Studies in Economic and Social History* (Princeton /Studies on the Near East), Princeton.
- RĀĠIB, Y., 1989: "À propos des cinq calendriers égyptiens de Ch. Pellat", *Studia Islamica* 70, p. 163-168.
- 1990: "Rectificatif à la note de Yūsuf Rāġib, "À propos des cinq calendriers égyptiens de Charles Pellat" ", *Studia Islamica*, 71, p. 198.
- 1995: "Les archives d'un gardien du monastère de Qalamūn", *Annales Islamologiques* 29, p. 25-57.
- 2007: "Une ère inconnue d'Égypte musulmane : l'ère de la juridiction des croyants", *Annales Islamologiques* 41, p. 187-207.
- RHEROUSSE, F., 2019: review of TILLIER 2017, *Zeitschrift der Savigny-Stiftung für Rechtsgeschichte: Kanonistische Abteilung* 105, p. 383-386.
- SAYYID, A.F., 2000: *Al-Dawla al-Fāṭimiyya fī Miṣr, Tafsīr ḡadīd*, Cairo.
- SHADDEL, M., 2018: "“The Year According to the Reckoning of the Believers”: Papyrus Louvre inv. J. David-Weill 20 and the Origins of the *hijrī* Era", *Der Islam* 95, p. 291-311.
- SIJPESTEIJN, P.M., 2013: *Shaping a Muslim State. The World of a Mid-Eighth Century Egyptian Official* (Oxford Studies in Byzantium), Oxford.
- THUNG, M.H., 1996: "Written Obligations from the 2nd/8th to the 4th/10th Century", *Islamic Law and Society* 3,1, p. 1-12.
- 2006: *Arabische juristische Urkunden aus der Papyrussammlung der Österreichischen Nationalbibliothek* (Corpus Papyrorum Raineri 26), München.

- TILLIER, M., 2017: *L'invention du cadî. La justice des musulmans, des juifs et des chrétiens aux premiers siècles de l'islam* (Bibliothèque historique des pays d'islam, 10), Paris.
- TILLIER, M., VANTHIEGEM, N., 2019: "Recording Debts in Sufyānid Fustāt: A Reexamination of the Procedures and Calendar in Use in the First/Seventh Century", in J. TOLAN (ed.), *Geneses: A Comparative Study of the Historiographies of the Rise of Christianity, Rabbinic Judaism and Islam*, London, p. 148-188.
- TIMM, S., 1984: *Das christlich-koptische Ägypten in arabischer Zeit: eine Sammlung christlicher Stätten in Ägypten in arabischer Zeit, unter Ausschluss von Alexandria, Kairo, des Apa-Mena-Klosters (Dēr Abū Mina) der Skētis (Wādi n-Natrūn) und der Sinai-Region* (Beihefte zum Tübinger Atlas des Vorderen Orients. Geisteswissenschaften, 41, 1), Wiesbaden.
- VAN BERCHEM, M., 1903: *Matériaux pour un Corpus Inscriptionum Arabicarum, Première partie, Égypte* (Mémoires publiés par les membres de la mission archéologique française au Caire, 19), Paris.
- VANTHIEGHEM, N., 2013: "Contracts de location arabes I: Un contrat de location d'une maison en arabe (P. Brux. Inv. E. 8449)", *Chronique d'Égypte* 88, p. 188-197.
- WENDRICH, W., VAN DER KOOPY, G., 2002: *Moving Matters. Ethnoarchaeology in the Near East. Proceedings of the international seminar held at Cairo, 7-1- December 1998*, Leiden, 2002.
- WIET, G., 1942: "Nouvelles inscriptions fatimides", *Bulletin de l'Institut d'Égypte* 24, p. 145-158.
- WISSA WASSEF, C., 1991a: "Calendar, Months of the Coptic", in A.S. ATIYA (ed.), *Coptic Encyclopedia*, 2, New York, Toronto, p. 438-440.
- 1991b: "Calendar and Agriculture", in A.S. ATIYA (ed.), *Coptic Encyclopedia*, 2, New York, Toronto, p. 440-443.
- WORP, K.A., 1985: "Hegira Years in Greek, Greek/Coptic and Greek/Arabic Papyri", *Aegyptus* 65, p. 107-115.
- WÜSTENFELD, H.F., MAHLER, E., 1961: *Wüstenfeld-Mahler'sche Vergleichungstabellen zur muslimischen und iranischen Zeitrechnung mit Tafeln zur Umrechnung orient-christlichen Ären*, Dritte (...) Auflage, J. MAYR, B. SPULER (ed.), Wiesbaden.
- YOUNES, K.M., 2016: "An Arabic Acknowledgment of a Debt on Papyrus", *Archiv für Papyrusforschung und verwandte Gebiete* 62,1, p. 195-202.
- ZACK, L., PILETTE, P., DEN HEIJER, J., 2021: "L'imāla finale en Égypte : une approche diachronique", in N. COMOLLI, J. DUFOUR, M.-A. GERMANOS (ed.), *Libellules arabes, sémitiques, italiennes, berbères. Études linguistiques et littéraires offertes à Jérôme Lentin par ses collègues, élèves et amis*, Paris, p. 629-662.

**ABSTRACT**

This study investigates the combination of Coptic months on the one hand, and years that refer to the chronology of Islam on the other, especially in the so-called fiscal (*ḥarāǧ*) year, in documentary and narrative sources from Egypt, with a focus on Copto-Arabic historiography. The main research question is that of the correlation between the choice of calendar (Coptic, fiscal, Islamic) and religious identity (Christian, Muslim). After a discussion on the problem of a lunisolar year in early Islamic Egypt, some documentary texts (Arabic papyri) from the first three centuries following the Arab conquest are analysed. The rest of the paper concentrates on the Fatimid period (969-1171 CE), when the *ḥarāǧ* year was given an official status. Again, the confessional prosopography in documentary texts is compared to the choice of system for naming months and counting years. The final section investigates the calendars used in a selected part of the Arabic *History of the Patriarchs of Alexandria*, the official history of the Coptic Church.

**KEYWORDS**

1. Chronology
2. Arabic papyri
2. Arabic historiography
3. Copto-Arabic literature
4. Arabisation
5. Islamisation