

Arabic Documents from the Staatsbibliothek in Hamburg I: Two Acknowledgements of Debt for Seed Advances (P.Hamb.Arab. Inv. 80-81)

Naïm Vanthieghem

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Text exemplar

- §1 The Staatsbibliothek in Hamburg holds a modest collection of Arabic papyri, acquired between 1910 and 1912 through the Deutsches Papyruskartell at the initiative of C.H. Becker, a papyrologist and Arabist who was then a professor at the city's Colonial Institute.¹ Of the 135 pieces mounted under glass by the skilled restorer H. Ibscher—many more remain in the institution's archives—roughly half were published by A. Dietrich in two volumes, released in 1937 and 1955, respectively.² Dietrich also authored an article featuring a fascinating Mamluk-era marriage contract written on silk.³ With the exception of the recent publication of 14 bifolios of papyrus containing nearly the entire text of Surah II of the Qur'an⁴—commonly known as the Surah of the Cow—the collection has received limited attention from papyrologists.⁵ During a visit to Hamburg in March 2010, I had the opportunity to examine the unpublished materials in this collection and uncovered several particularly noteworthy pieces, some of which are now in press.⁶
- §2 This article presents the edition of two debt acknowledgments from the Fatimid period preserved in this collection (P.Hamb.Ar. Inv. 80 and 81). Determining their provenance would have been impossible were it not for one of the witnesses, a certain ĠJamā'a, whose family name is not mentioned. In document 2, he is identified as the preacher (*ḥkhatīb*) of Tuṭūn, a village in southern Fayyūm located on the Bahr Tanabtawayh, where other pieces from Hamburg's collection were also found.⁷

Layout, Script, and Formulary

- §3 The two documents exhibit similar formal and formulary features. From a formal perspective, both are written on sheets of what appears to be laid paper, identifiable by faint parallel laid lines running vertically relative to the text. These sheets were cut from an old — most likely the same — accounting ledger. Traces of writing in the left and right margins of the debt acknowledgments suggest that the original ledger was likely written on both recto and verso, at least in part. This implies that the entries were initially recorded in an oblong kind of *codex* of the *daftar* type, a format well-documented in Fatimid accounting practices, but still insufficiently studied and in need of systematic scholarly analysis. The reused ledger appears to have recorded receipts and expenses of grains, legumes, and other agricultural produce from a village and its surrounding area (*nāhiya*), though the village name is not specified—given the mention of the village of Tuṭūn in document 2, it is possible that the surrounding area refers to this location. The preserved portion of this ledger lists in sequence beans (*fūl*), wheat (*qamh*), and barley (*sha'īr*), all quantified in sacks (*tillīs*). These items were either distributed as seed advances (*taqwiya*), a matter that will be explored later in this article, or sold (*mabīr*).⁸
- §4 The main body of both documents was written in black ink by the same hand. This handwriting, marked by frequent abusive ligatures and graphic simplifications, reflects the work of a skilled and experienced scribe. In contrast, the two witness statements were added by a different hand, that of Nahār b. ĠJamā'a, the preacher (*ḥkhatīb*) of Tuṭūn. This second hand, equally skilled as the main scribe, used ink of a different composition, which has since faded to a reddish hue. Notably, while the primary scribe employed diacritical marks sparingly, the second hand omitted them altogether.

¹ ↗ Tillier and Vanthieghem 2024: 7–8.

² ↗ Dietrich 1955.

³ ↗ Dietrich 1952.

⁴ This text was the subject of an edition and study in ↗ Tillier and Vanthieghem 2024.

⁵ E. Grob appears to be the only one who conducted on-site research to examine some of the letters discussed in her dissertation, for which she also reproduces images. See, in particular, ↗ Grob 2010: 165, 167, 175, 180 et 190.

⁶ P.Hamb.Ar. Inv. 42 (*amān*), P.Hamb.Ar. Inv. 77 (fiscal register) and P.Hamb.Ar. Inv. 83 (*amān*) will appear in N. Vanthieghem, “Letters of protection (*amāns*) from the Fatimid period,” and in ↗ Tillier and Vanthieghem 2025.

⁷ On the provenance of the Hambourg papyrus collection, see ↗ Tillier and Vanthieghem 2024: 8–9. Beyond the documents cited in this book as originating from Tuṭūn, the documents P. Hamb. Inv. 42, 77, and 83 can now also be noted as coming from the same village.

⁸ An edition of the remaining portions of this ledger will be published separately in a forthcoming issue of this journal.

§5 The formularies of the two documents are nearly identical. Following the religious invocation (*basma-la*), the text begins with the verb *aqarra*, commonly used at the start of debt acknowledgments from this period. This is followed by the debtor's name and a formula stating that the debtor is of sound mind and body (*fī sīḥat āqli-hi wa-badni-hi*), legally competent (*jawāz amrihi*), and acting freely and without coercion (*ghayr mukrah wa-lā mujbar*). The text then specifies the name of the creditor using the formula *an ʻalayhi wa-īnda-ha wa-qibali-hi wa-fī khāliṣ mālihi wa-dhimmāthi li-fulān* ("is indebted and liable, from his own resources and under his responsibility, to"). The nature of the obligation is detailed with the preposition *min*, followed by the amount in *irdabbs*. It is declared binding (*daynan thābitan wa-haqqan wājibān lāzīman*), with an explicit acknowledgment made in the presence of witnesses (*iṭarāfa lahu bi-dhālika īnda shuhūd hādhā l-wathīqa*). Further, the individual commits not to evade repayment in any way (*an al-khūrij min al-dayn*). The acknowledgment is made explicitly "under the guarantee" of a third party (*bi-damān fulān*), a detail that needs further discussion. The document concludes by noting that witnesses were called to testify (*ashhada ʻalā nafsihi*), with the date also specified. Finally, the two witness statements follow, each beginning with the customary *shahida* ("He testified") followed by the witness' name.

The Nature of the Debt

§6 The debt acknowledgments concern, in one case, two-thirds of an *irdabb* of *barsīm* seeds (1), and in the other, one and one-third *irdabbs* of *julbān* seeds (2). *Barsīm* (*Trifolium alexandrinum*), commonly referred to in papyri as *qurṭ* (a term borrowed from the Greek *χόπτος*), is an herbaceous plant often mistranslated as "clover," though it bears no resemblance to the European variety. Instead, it is a type of alfalfa, which historically—and still today—served as the primary forage for working animals like donkeys, camels, horses, and mules, as well as for larger livestock such as cows and buffaloes.⁹ According to Ibn Mammāṭī (d. 606/1209), alfalfa could be sown at various times of the year, between Bābā (September) and Hatūr (January), depending on the region and the variety.¹⁰ However, sowing could not begin until after the Nile floodwaters receded, a process that was not complete in the Fayyum region until late November or even December.¹¹

§7 Once the water had receded, farmers in the Fayyum plowed the land before sowing, unlike in other parts of the Nile Valley where seeds were sown directly onto the silt deposited by the flood.¹² Approximately 2½ *waybas* of seeds were needed to sow a *feddān* of land.¹³ Depending on the region and climatic conditions, alfalfa could be harvested two to three times a year, or even four times in particularly humid areas. Under ideal conditions, harvesting occurred roughly every thirty days. The first or first two cuts provided green forage for livestock, while the final cut was left to dry in the field and then transported to threshing areas for seed production.¹⁴ During the four-month growing season, depending on weather conditions, a single *feddān* of *barsīm* could sustain between one and four oxen for nearly a month,¹⁵ or produce 44,005 kilograms of green forage over three to four cuts.¹⁶ The final cut typically yielded between two and three *irdabbs* of *barsīm* seeds.¹⁷

⁹ For more details on *barsīm*, see [Fairchild 1902](#).

¹⁰ [Ibn Mammāṭī, Kitāb qawānīn al-dawāwīn](#): 262; [Cooper 1974](#): 117.

¹¹ For details on the receding of waters in the Fayyum following the inundation, see [Tillier and Vanthieghem 2020](#): 357–359.

¹² [Girard 1882](#): 42.

¹³ [Ibn Mammāṭī, Kitāb qawānīn al-dawāwīn](#): 262; [Cooper 1974](#): 117.

¹⁴ [Girard 1882](#): 43–44.

¹⁵ [Girard 1882](#): 43–44. The author notes that in the Minūfiyya province, two oxen could graze on ¼ of a *feddān* per day, while in Tanta, the same pair required ½ a *feddān* for a month.

¹⁶ [Fairchild 1902](#): 14 states that the average yield of forage in 1902 was 28 tons per acre (4047 m²), which means ± 44,05 tons per *feddān* (6368 m²)

¹⁷ [Ibn Mammāṭī, Kitāb qawānīn al-dawāwīn](#): 263; [Cooper 1974](#): 117 and [Girard 1882](#): 43.

- §8 *Julbān*, or grass pea (*Lathyrus sativus* L.), is a legume whose peas were used for human consumption, while the stalks served as animal fodder.¹⁸ It also had medicinal properties.¹⁹ Ibn Mammātī notes that it was sown between Hatūr (November) and Kayhak (December), alongside other legumes such as lentils ('āds) and chickpeas (*himmis*).²⁰ Greek documents from the Fayyūm suggest that sowing could extend into January and even February.²¹ To sow a *feddān*, between four *waybas* and one *irdabb* of seeds were required,²² though Girard specifies that two-thirds of an *irdabb* could suffice.²³ After sixty days, *julbān* could be harvested as forage. Its peas matured after approximately one hundred days²⁴ and were harvested in Barmūda (April), according to Ibn Mammātī.²⁵ A *feddān* of grass pea could yield about ten *irdabbs* of peas and ten to fifteen camel-loads of green forage,²⁶ equivalent to 1800–2700 kilograms.²⁷
- §9 Beyond their vital role as fodder crops and in human nutrition, these two species were integral to agricultural cycles. Sown on fallow or nutrient-depleted lands, particularly those affected by salinization, they played a key role in soil regeneration. Land cultivated with these crops, known as *bāq*, was highly valued for its proven ability to restore fertility for growing wheat and barley.²⁸

The Context and Mechanism of the Debt

- §10 The two acknowledgements were issued in the name of Ḥarīr b. Muḥammad, who admits to having incurred a debt involving quantities of seed to a certain Muḥammad b. Ayyūb. In both cases, the transaction is carried out explicitly “with the guarantee” (*bi-damān*) of an individual identified as 'Umar b. Aḥmad. On the surface, the arrangement appears straightforward: Ḥarīr b. Muḥammad owes a debt in seed to his creditor, and 'Umar b. Aḥmad guarantees repayment from his own assets should Ḥarīr default.
- §11 Such acknowledgements of debt for small amounts of grain or seed are common in Arabic documentary material.²⁹ Most editors interpret them as grain debts or debts related to agricultural produce, though they rarely clarify the precise nature or purpose of the debt. Werner Diem has suggested viewing these as micro-loans mainly of cereals between acquaintances, similar to those mentioned in private letters—where it is not unusual to find someone asking a correspondent to send a small amount of wheat.³⁰ More recently, L. Bondioli has offered a compelling hypothesis that these documents may represent forward contracts, whereby a merchant would purchase a future agricultural yield still in the field, in exchange for which the cultivator committed to delivering the crop after the harvest.³¹ Such arrangements are well attested in papyrological sources, particularly for commodities such as flax, grapes, and wood, though they typically involve large quantities.³² It therefore seems unlikely

18 ↗ Girard 1882: 45.

19 ↗ Ibn El-Beīthar, *Traité des Simples* Ibn al-Beīthar: 358–359.

20 ↗ Ibn Mammātī, *Kitāb qawānīn al-dawāwīn*: 260–261; ↗ Cooper 1974: 116.

21 ↗ Rathbone 1991: 260–262.

22 ↗ Ibn Mammātī, *Kitāb qawānīn al-dawāwīn*: 260–261; ↗ Cooper 1974: 116.

23 ↗ Girard 1882: 45.

24 ↗ Girard 1882: 45.

25 ↗ Ibn Mammātī, *Kitāb qawānīn al-dawāwīn*: 261; ; ↗ Cooper 1974: 116.

26 ↗ Girard 1882: 45.

27 The average camel load, estimated at 180 kg, is used here as a reference. See ↗ Adams 2007: 49–52.

28 ↗ Cooper 1974b: 94 and 97–101.

29 For examples, see in particular *Chrest.Khoury* 34–36; *CPR* XXVI 19; *P.Cair.Arab.* II 106–112; *P.RagibQalamun* 1.

30 ↗ Diem 2006: 47–49.

31 ↗ Bondioli 2021: 106–135.

32 On advance sales in general, see the overview by ↗ Rāḡib 1982: 7–12 along with ↗ Diem 2006.

that merchants would have devoted their time to purchasing trivial amounts in advance—especially for something like clover (*barsīm*) or grass pea (*julbān*) seeds, which held little market value.

- §12 In a forthcoming book, Mathieu Tillier and I argue that these so-called microcredits or forward sales are, in reality, debt acknowledgements issued by the fiscal administration in connection with seed advances distributed by state agents or their representatives to cultivators (*muzāri‘ūn*) to enable them to sow their fields.³³ These advances, known as *taqwiya* (pl. *taqāwī*), were typically allocated shortly before the sowing season and, in principle, were to be repaid within the year. In practice, however, repayments were often significantly delayed—if made at all—leaving the burden of the debt to fall on the heirs. During the period under consideration, the distribution of seeds in villages was typically handled by the *khāzin* (“cashier”), who was in charge of the public granaries. Alternatively, it could be undertaken through the intermediary of a *dāmin*—usually a wealthy individual from the village or nearby, who was granted a tax farm (*damān*) allowing him to collect taxes on behalf of the state from a particular village over a set period.
- §13 In the case of the two debt acknowledgements presented here, Ḥarīr b. Muḥammad appears to have been a cultivator (*muzāri‘i*). As the recipient of such seed advances, he would have been able to sow approximately 1.59 *feddāns* (c. 10,093 m²) of clover (*barsīm*), and 2 *feddāns* (12,696 m²) of grass pea (*julbān*).³⁴ However, if we accept the model of state-distributed seed advances outlined above, what then were the respective roles of Muḥammad b. Ayyūb and ‘Umar b. Aḥmad in this transaction? The phrase *bī-damān* associated with the latter strongly suggests that ‘Umar b. Aḥmad was the *dāmin*—the tax farmer—for the village of Tuṭūn that year. As for Muḥammad b. Ayyūb, he was most likely the local representative of the *dāmin* within the village.

Editions

1. Acknowledgement of Debt for Clover (*barsīm*) Seed Advances.

- §14 An oblong fragment of beige paper, preserved in its full height and width. The top and bottom margins are relatively narrow; the lateral margins are even tighter, with the text written almost up to the right and left edges. The document comprises fifteen lines, penned—as in the following document—by two different hands. The first hand wrote the main body of the text (lines 1–11) in black ink, while the second hand added two testimonial subscriptions (lines 12–15) in ink that has since browned with age. Both hands use a cursive script characterized by numerous ligatures. Some letters are marked with diacritical dots.

P.Hamb.Arab. Inv. 80

18.2 (h) × 8.3 (w)

Tuṭūn
Shawwāl 441 /
February–March 1050

 Fig. 1: P.Hamb.Arab. Inv. 80.

³³ Tillier and Vanthieghem 2025.

³⁴ The calculation for *barsīm* is as follows: $2\frac{1}{2}$ *waybas* (approximately 0.42 irdabb) of seed are required to sow one *feddan*. The $\frac{2}{3}$ irdabb received by Ḥarīr b. Muḥammad would thus have allowed him to cultivate approximately 1.59 feddans. As for grass pea, since $\frac{2}{3}$ irdabb of seed is sufficient to sow one *feddan* (see above), the $1\frac{1}{3}$ irdabb (i.e., 4/3 irdabb) mentioned in document 2 would have been enough to sow 2 *feddans*.

(m1) بسم الله الرحمن الرحيم

اقر حرير بن محمد وشهاد على نفسه طوعا في صحة عقله

وبدنـه وجواز امره غير مكره ولا مجبـر ان عليه وعنهـه وقبلـه

وفي خالص مالـه وذمـته لمـحمد بن ايـوب من البرـسيـم

5 المـغـربـيـلـ المـهـربـ ثـلـيـ اـرـدـبـ دـيـنـاـ ثـابـتـاـ

وـحقـاـ وـاجـبـاـ لـازـمـاـ اـعـتـرـفـ لـهـ بـذـلـكـ عـنـ شـهـوـرـ

هـذـهـ الـوـثـيقـةـ لـاـ يـدـافـعـ بـذـلـكـ وـلـاـ يـحـتـجـ فـيـهـ بـحـجـةـ

وـلـاـ يـعـتـلـ فـيـهـ بـعـلـةـ عـنـ الـخـرـوجـ مـنـ الـدـيـنـ

الـمـذـكـورـ ذـلـكـ بـضـمـانـ عـمـرـ بـنـ اـحـمـدـ

10 وـبـذـلـكـ اـشـهـدـ عـلـىـ نـفـسـهـ فـيـ شـوـالـ سـنـةـ اـحـدـيـ

وـارـبـعـينـ وـارـبـعـمـاـيـةـ

(m2) شـهـدـ حـفـاظـ بـنـ كـنـانـيـ بـجـمـيـعـ مـاـ فـيـهـ

وـكـتـبـ عـنـهـ بـاـذـنـهـ وـمـحـضـرـهـ

شـهـدـ شـهـادـتـهـ جـمـاعـةـ عـلـىـ اـقـرـارـ الـمـقـرـ بـمـاـ فـيـهـ

15 وـكـتـبـ بـيـدـ <هـ> فـيـ تـارـيـخـهـ

1 بـسـمـ اللهـ الـرحـمـنـ الـرحـيمـ 2 اـقـرـ عـقـلـهـ 3 chart. 4 بـصـمـانـ 5 اـعـتـرـفـ 6 دـمـتـهـ 7 chart. 8 مـاـبـهـ 9 chart. 10 مـاـبـهـ 11 chart.

¹ In the name of God, the Compassionate, the Merciful. ² Ḥarīr b. Muḥammad has acknowledged and given testimony against himself willingly, while sound in mind ³ and body, fully competent, under no constraint or coercion that he owes, is liable for, and is a debtor ⁴ from his own funds and under his own responsibility to Muḥammad b. Ayyūb. He owes him, in ⁵ sifted and winnowed ⁴ clover seeds, two-thirds of an *irdabb*, that constitutes a confirmed debt ⁶ and an obligatory, binding right. He has acknowledged this in the presence of the witnesses ⁷ of this document. He may neither dispute it, nor invoke any evidence, ⁸ nor offer any excuse to be released from the debt, ⁹ whose repayment is guaranteed by ʻUmar b. Aḥmad. ¹⁰ He has given testimony against himself in the month of Shawwāl, of year ¹¹ four hundred and forty-¹⁰one. ¹² Ḥafāz b. Kinānī testifies to all the contents of the document. ¹³ Written on his behalf with his permission and in his presence. ¹⁴ Jamāʻa testifies that the obligor acknowledges the content of the document. ¹⁵ Written in his own hand, on the date recorded in the document.

§15 5 *al-mugharbal al-muhrab* The participle *mugharbal*, a denominal form derived from *ghirbāl* (“sieve”), is rarely attested in the published documentary record to date. See P.Cambr.Genizah 54.5; P.QuseirArab. I 12 recto.4. The second participle, for its part, is a hapax legomenon: it is a Form IV derivative of the root h-r-b, which literally means “to drive out” or “to remove” (cf. [Kazimirski, Dictionnaires, II, 1409b](#)). Both epithets serve to indicate that the *barsīm* seeds were entirely free of impurities—whether plant debris, such as the calyx surrounding the seed, soil, or small stones.

§16 12 *wa-kutiba bi-idhnihi wa-mahdarihi* To indicate that a testimony was written not by the witness himself but by a third party, notaries typically employ the phrase *wa-kutiba bi-amrihi wa-mahdarihi* (“written by his order and in his presence”). I am not aware of any instance in which the term *amr* is substituted with *idhn*.

§17 14–15 *wa-shahida shahādatahu ... wa-kataba bi-khattihi* The witness, here as in the second document, alters the standard formulation of the subscription, which would normally follow the structure *wa-shahida ... wa-kataba shahādatahu bi-khattihi* (“and he testified ... and wrote his testimony in his own hand”).

2. Acknowledgement of Debt for Advances of Grass Pea (*julbān*) Seeds

§18 An oblong piece of beige paper, preserved in its full height and width, though the upper left part shows slight damage. The top and bottom margins are relatively narrow, while the side margins are even more constricted, with the text extending almost to the very edges. The document contains thirteen lines, written—like the previous document—by two distinct hands. The first hand composed the main body of the text (lines 1–10) in black ink, while the second hand added two testimonial subscriptions (lines 11–13) in ink that has since faded to brown. Both hands employ a semi-cursive script with numerous ligatures, and some letters are marked with diacritical dots.

P.Hamb.Arab. Inv. 81

16.4 (h) × 8.31 (w)

Tūtūn

Shawwāl 441 /
February–March 1050

▣ Fig. 1: P.Hamb.Arab. Inv. 81.

(m1) بسم الله الرحمن الرحيم

اقر حرير بن محمد وأشهد على نفسه طوعا في صحة [عقله وبدنه]

وجواز امره غير مكره ولا مجبى ان عليه وعنه وقبله

وفي خالص ماله وذمته لمحمد بن ايوب من الجلبان النقى

5 من العلث والقصل وجميع ذلك اردب

واحد وثلث اردب دينا ثابتنا وحقا واجبا

لازما اعترف له بذلك عند شهود هذه الوثيقة

لا يدفع بذلك ولا بشيء فيه عن الخروج من الدين المذكور

وذلك بضمان عمر بن احمد وبذلك اشهد على

10 نفسه في شوال من سنة احدى واربعين واربع مائة

(m2) شهد شهادته جماعة

الخطيب بططون على اقرار المقر بما فيه وكتب بيده في تاريخه

شهد حفاظ بن كنانى؟ بجميع ما فيه وكتب عنه بأمره ومحضره

2 فى. 4 chart. 5 القصل. 9 بضمان. 10 مایه. chart.

¹ In the name of God, the Compassionate, the Merciful. ² Ḥarīr b. Muḥammad has acknowledged and given testimony against himself willingly, while sound [in mind and body], ³ fully competent, under no constraint or coercion that he owes, is liable for, and is a debtor ⁴ from his own funds and under his own responsibility to Muḥammad b. Ayyūb, ⁵ in grass pea (*julbān*) free from any admixture and from any defect, in the total amount of one ⁶ and one-third irdabbs, that constitutes a confirmed debt and an obligatory, ⁷ binding right. He has acknowledged this in the presence of the witnesses of this document. ⁸ He may neither dispute it, nor (invoke) anything

whatsoever to be released from the debt, |⁹ whose repayment is guaranteed by 'Umar b. Aḥmad. He has given testimony against |¹⁰ himself in the month of Shawwāl, of the year four hundred and forty-one. |¹¹ Jamā'a, |¹² the preacher at Tuṭūn, |¹¹ testifies |¹² that the obligor acknowledges the content of the document. |¹² Written in his own hand, on the date recorded in the document. |¹³ Ḥafāẓ b. Kinānī testifies to all the content of the document. |¹³ Written on his behalf with his permission and in his presence.

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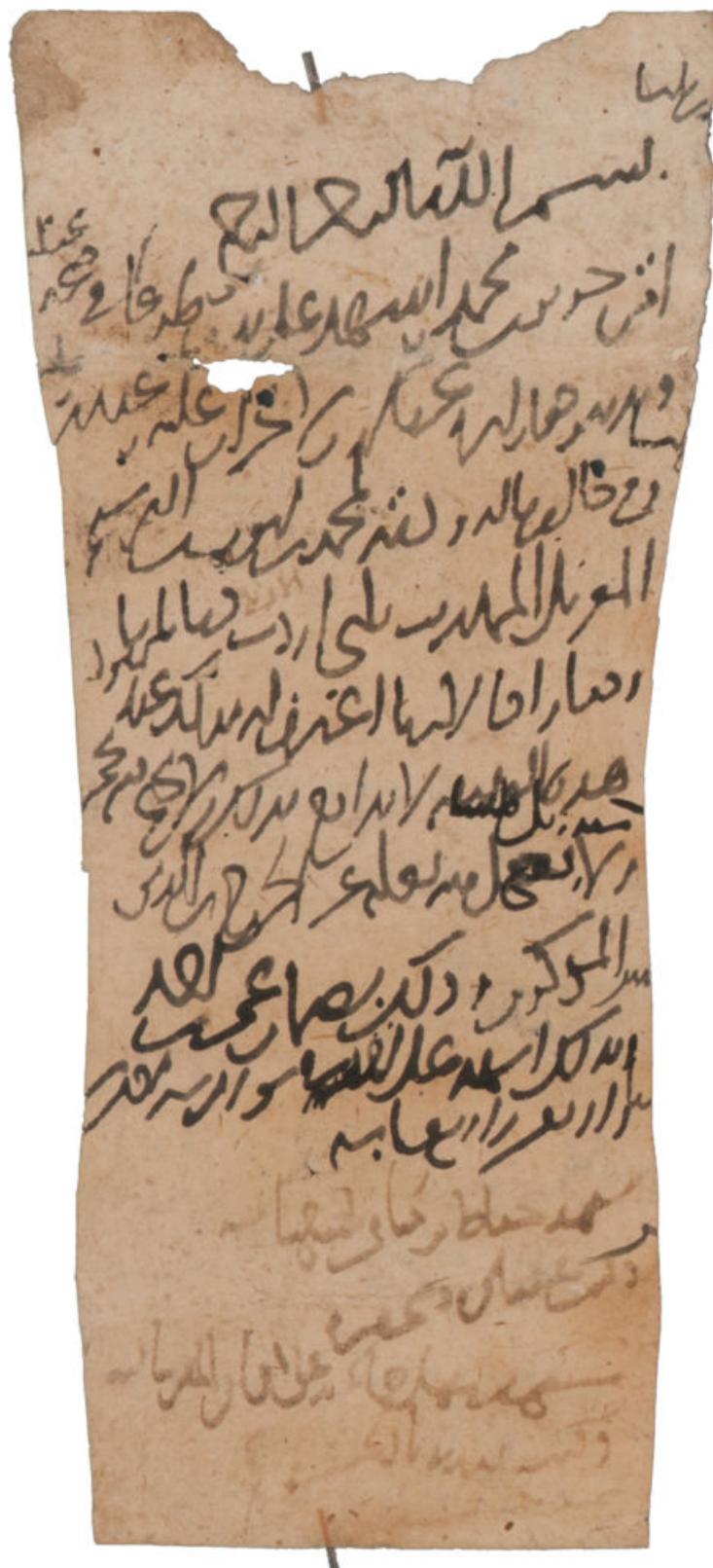


Fig. 1: P.Hamb.Arab. Inv. 80.

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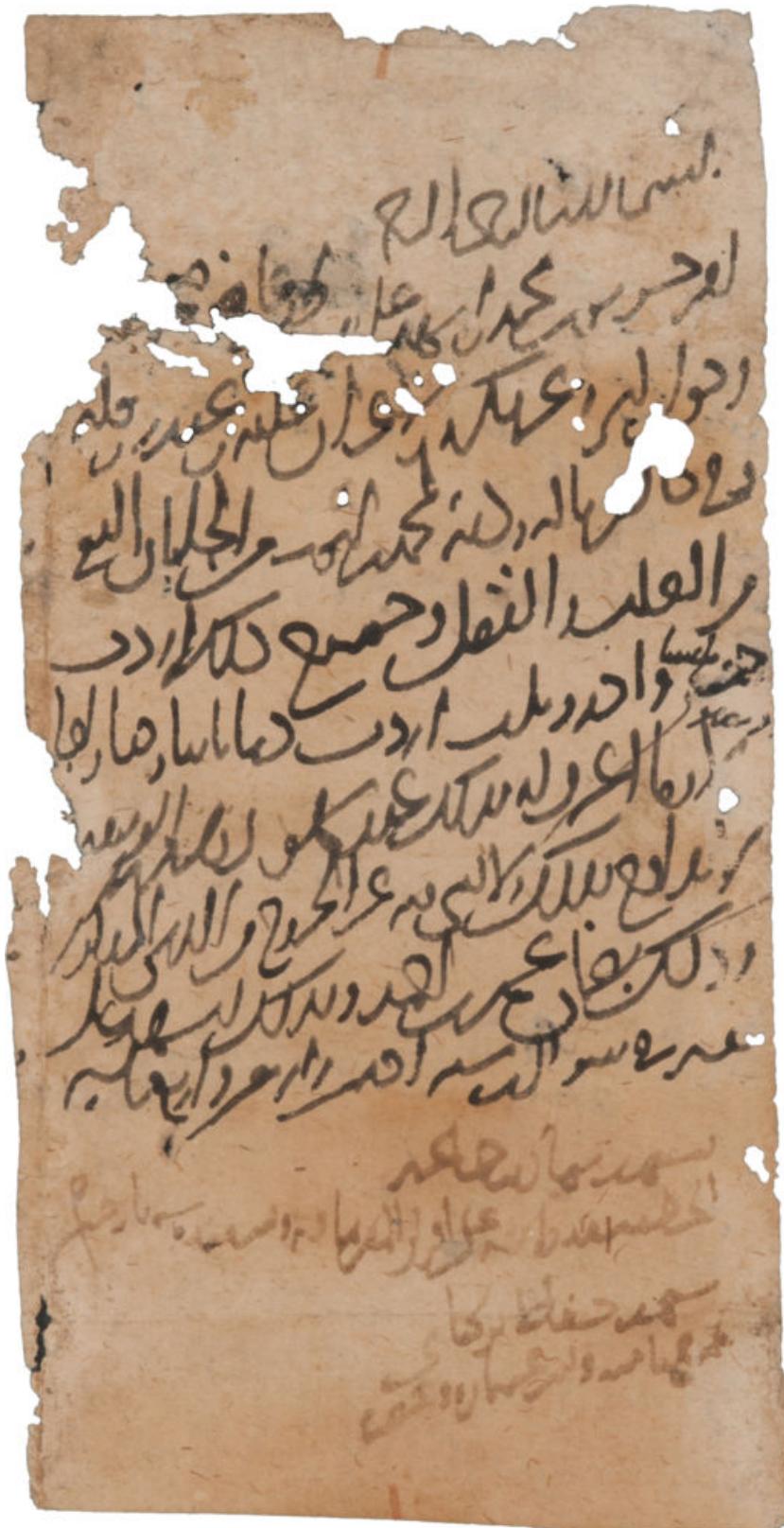


Fig. 1: P.Hamb.Arab. Inv. 81.

Vanthieghem, Naïm

ORCID:  <https://orcid.org/0000-0002-1380-5153>

CNRS Délégation Paris B: Paris, Île-de-France

nvthiegh@gmail.com