

Determining the Origin of Some Marginal Notes of Cod. ÖNB H.O. 42a through Ink Analysis

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Cod. ÖNB H.O. 42a is a copy of Muṣṭafā Bostān's (1498-1569/70) *Süleymānnāme* (or, as its second title reads, *Tārīḥ-i sulṭān Süleymān*) on the earlier part of the reign of the Ottoman sultan Süleymān the Magnificent (1520-1566). Previously, scholars believed that its author was called Ferdī. This assumption is based on the alleged occurrence of this pen-name in the author's Persian poem on fol. 6r of cod. ÖNB H.O. 42a. [Yurdaydın 1955] proved that the last verse of this poem had been misunderstood and the author of *Süleymānnāme* was Bostān.

The title in red ink on fol. 1r of cod. ÖNB H.O. 42a says *mü'ellifi Ferdī* "Its author is Ferdī". In the margin of fol. 6r next to the above-mentioned poem, there is a remark in black ink formulated perhaps by a non-first-language speaker (*ṣāhib mü'ellif Ferdī ile taḥalluṣ eder* "the owner author/the Lord author gives his pen-name as Ferdī"). The handwriting of both remarks possibly is European.

The ms. belonged to Hammer-Purgstall, as one can see from the imprint of his Oriental seal. If one could determine the composition of the ink the remark on fol. 6r was written with as well as that of Hammer's seal, one could prove a) whether European or Oriental inks were used and b) whether for Hammer's seal the same ink was used as for the remark on fol. 6r. If so, this would identify Hammer as the author of the remark (and of the erroneous title which is by the same hand). Therefore, a first analysis of the inks of the manuscript versus the inks of the remarks was done. Both remarks, Hammer's seal as well as a piece of normal text were photographed with UV, VIS, NIR. The red ink on fol. 1r vanishes under NIR wavelengths, whereas the black inks of the main text and of the remark on fol. 6r as well as the ink used for Hammer-Purgstall's oriental seal are visible in all three photographs, indicating that possibly none of the black inks used for cod. ÖNB H.O. 42a contains iron gall and thus they could be of Oriental origin.

Key words:

Ink Analysis, VIS NIR UV, 16th Century Ottoman Chronicle.

CHNT Reference:

Claudia Römer 2018. Determining the Origin of Some Marginal Notes of Cod. ÖNB H.O. 42a through Ink Analysis.

Cod. ÖNB H.O. 42a is a 16th-century copy of Muṣṭafā Bostān's (1498-1569/70) *Süleymānnāme* on the earlier part of the reign of Süleymān the Magnificent (1520-1566), comprising the years 1520-1542. Bostān Çelebi's full name was Muṣṭafā bin Mehmed Bostān Tīrevī. He came from Tīre (Tire) in Western Anatolia. Bostān made a career within the *medrese* system (system of religious schools, where some worldly subjects were taught as well), with some of the most renowned scholars of his time as his teachers. After serving as a *müderris* (professor) at various *medreses* himself, he became *cadi* (judge) of Bursa, then of Edirne in 1544, subsequently being promoted to the office of the *cadi* of Istanbul in 1545. In 1547, he was appointed *kazasker* (chief judge) of Anatolia, then of Rumelia. He stayed in office until 1551, when he was deposed on the grounds of having given a verdict unfavourable for the Grand vizier Rüstem Paşa (died 1561). Subsequently, he was acquitted. Bostān Çelebi has become known as the author of a number of mostly religious works. The *Süleymānnāme* is his only historical work [Aykut 1992].

Until now, seven manuscripts of the *Süleymānnāme* have been known, two of them at the Austrian National Library (H.O. 42a and b [Flügel 1865, nos. 998 and 999 respectively – H.O. 42b comprises the years 1520-1529 only, see Yurdaydın 1955: 147, note 38]) and three in Turkey. The other manuscripts are:

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- 1) Süleymaniye Kütüphanesi, Aya Sofya no. 3317. It tells the history of Süleyman the Magnificent from 1520-1536 (see [Yurdaydın 1955: 151]).
- 2) Topkapı Sarayı Müzesi Kütüphanesi Revan no. 1283. This manuscript comprises the years 1520-1523 only [Yurdaydın 1955: 149].
- 3) Türk Tarih Kurumu Kütüphanesi no. 18. It contains the years 1520-1539 [Yurdaydın 1955: 164].
- 4) Torino Biblioteca nazionale a IV 14 [Nallino 1900:84, no. 103]. This manuscript was badly burned during World War II [Yurdaydın 1955: 147], so that only fragments of each page have survived. However, it is still partly readable (see [Römer 1992: 238, note 10]).
- 5) HS.or.oct.1142, Staatsbibliothek Preußischer Kulturbesitz Marburg. It describes the years 1520-1539/40 and was copied in 1591. Its title is given as *Ğazavāt-i sulṭān Süleymān*. [Flemming 1968: no 138]; see also [Römer 1992], [Römer 1997]. This manuscript is neither mentioned by [Yurdaydın 1950], [Yurdaydın 1955], nor by [Aykut 1992]. It was found by coincidence in an envelope [Flemming 2018: 37].

Although the facts that have led to the correct identification of the author of the *Süleymānnāme* have been known for a long time within the Ottomanist community, it may be useful to give a short overview of the state of research here.

On the basis of the different manuscripts, Yurdaydın has shown that Bostān Çelebi wrote the *Süleymānnāme* over a longer period, namely between 1524 and 1547, adding chapters and adapting the eulogies to be used after the names of dignitaries according to whether they had died in the meantime [Yurdaydın 1955].

The *Süleymānnāme* is a typical work of 16th-century Ottoman “divan prose” with a large amount of Arabic and Persian elements [Römer 1997]. As such, like many other Ottoman prose works, it contains some of its author’s own poems, each one given under the heading of *li-mü’ellifihī* “by its author” [Römer 1992]. A total of thirty-six of Bostān’s poems could be gleaned from four manuscripts of the *Süleymānnāme*, namely ÖNB H.O. 42a and b, Torino Biblioteca nazionale a IV 14, and HS.or.oct.1142, Staatsbibliothek Preußischer Kulturbesitz Marburg (see the comparative list [Römer 1992:238]). One of these poems, which will be given below (see also Fig. 4), played a prominent role in the discussion about the author of the *Süleymānnāme*.

At some point during the 19th century, the manuscript ÖNB H.O. 42a was newly bound with a European binding, which, on its spine, gives the name of Ferdī as the alleged author’s name in Roman characters, “Suleiman’s Geschichte von Ferdī”. Thus, nothing can be said about its original binding. The manuscript comprises 364 folios. In what follows, discussing the origin of the “Ferdī legend” and the possibilities of tracing it back to its origin with new methods will be at the centre of the present paper. The focus will mainly be on the paratexts of this manuscript¹.

On the second flyleaf (see Fig. 1), the title of the work is given in red ink, saying *tārīḥi (sic!) ṣāḥib k̄ānūn Süleymān mü’ellifi Ferdī* “The History of the Owner of the Law, Süleymān. Its author is Ferdī”. First of all, this title differs from the title under which this work is generally known, i.e. *Süleymānnāme*. Besides, the title on the second flyleaf displays a rather unusual way of naming Sultan Süleymān the Magnificent, whose Ottoman epithet was *Ḳānūnī*, the Lawgiver: *Ḳānūnī Sulṭān Süleymān*. Moreover, there is a misspelling in the first word.

This neat handwriting of the so-called *nashī* type of the Arabic script looks more like a European hand, albeit a very beautiful and skilled one.

Fol. 1r contains two owners’ marks (see Figs. 2 and 3):

The first owner who left his seal and the date of his purchase was a certain Muṣṭafā Ḥafīd Naḳṣbendī, whose note written in Arabic can be read as *istaṣḥabahū l-‘abdu l-muḍannab as-sayyid Muṣṭafā Ḥafīd Naḳṣbendī fī 20 [Ramazān] sene 1240*. “This sinful slave [of God], as-sayyid Muṣṭafā Ḥafīd Naḳṣbendī has made it his possession on 20 Ramazān 1240 (9 May 1825)”. So far, nothing could be found out about this person, who from his name can be assumed to have been a member of the Naḳṣbendī confraternity and in view of his use of the title of *as-sayyid* must have traced back his ancestry to the Prophet – whether it be true or not.

His seal reads as follows, *Ḥafīd man ṣabara zaḫara* “Ḥafīd. Whoever is patient is victorious”. Above the purchase remark, there is a so-called *kuyruklu imzā* (a “tailed” signature). “Tailed” signatures were used by finance officials [Velkov 1984]. It is indecipherable.

¹ for studies on paratexts of manuscripts, see https://www.manuscript-cultures.uni-hamburg.de/Projekte_p2_e.html#PBA., retrieved February 16, 2019.

After Muṣṭafā Ḥafīd Naḳṣbendī, the famous Orientalist Joseph Freiherr von Hammer-Purgstall (1774-1856) acquired the manuscript. Hammer's Oriental manuscripts were bought by the then Hofbibliothek in 1842 and form a substantial part of the Oriental manuscript collection of the Austrian National Library. However, Hammer had sold what was to become the H.O. series, *Historia osmanica*, earlier on in 1832 [Flügel 1865:introduction].

Hammer's Oriental seal is to be found in all the manuscripts that once belonged to him. Its text is obviously an attempt at imitating the last two surahs of the Qur'an (nos. 113 and 114), a fact that from today's point of view can only be regarded as a typical orientalist approach. Here, Hammer's somewhat imprecise German translation is given [Hammer-Purgstall 1848], followed by a more accurate rendering in English.

'*abduhū*
*as-sayyāḥ as-sāmīr Yūsuf Ḥāmer*1223
a'ūdu bi-rabbi l-ġāmīr wa-l-'āmir
rabbi d-dāmīr wa-t-tāmīr
min šarri t-tāmīr wa-l-ḥāmīr
wa-min šarri l-asāwid wa-l-aḥāmīr

Gottes Diener

Der Reisende, der die Märchen beim Mondenschein liebende Hamer
 Ich flüchte mich zum Herrn der undurchfurchten See und des bebauten Landes.
 Zum Herrn des Kamels mit dünnen Weichen und des fruchttragenden Palmenbaumes.
 Vor dem Bösen des hergelaufenen Abenteurers und des grossen Schwätzers
 Und von dem Bösen der Schwarzen und Rothen.

God's slave

The traveller who likes nightly amusements, Yūsuf Ḥāmer 1223 (1808/09)
 I take refuge with the Lord of wastelands and the prosperous countryside,
 The Lord of the slender one and the fruit-bearing one,
 From the evil of the jumping one and the pouring one,
 From the evil of the black ones and the red ones.

For a large part of the reign of Süleymān the Magnificent, Hammer in his *Geschichte des Osmanischen Reiches*, vol. 3 [Hammer 1828] has used this manuscript extensively due to its detailed contents, especially as far as nominations into offices and depositions are concerned. Hammer thought that the author of this work was called Ferdī. After Hammer, other scholars followed him and thus "Ferdī"'s history became widely known among Ottomanists [e.g. Thúry 1894].

This assumption was based on the alleged occurrence of this pen-name in a Persian poem of the author on fol. 6r (see Fig. 4). However, as Yurdaydın, who originally believed in Ferdī's existence as well [Yurdaydın 1950] could prove later on, this idea was totally erroneous and *ferdī* only is a normal word in the last verse of this Persian poem by the author of the *Süleymānnāme* [Yurdaydın 1955].

Fardī/fardī, pronounced Ferdī/ferdī in Ottoman, means nothing else than "somebody", in a negative sentence as in the case of this verse, "nobody". Ferdī as a name or pen-name would have meant "the single one", "the special one". Thúry [1894:39-41] had identified a poet of the reigns of Süleyman the Magnificent and Selim II (1566-1574) with the pen-name of Ferdī, who in reality died in 1574 at the beginning of Murad III's (1574-1595) reign and did not leave any work comparable to the *Süleymānnāme* [Yurdaydın 1955:139-140]. Thúry [1894], basing himself on Hammer's view, had brought forth that the copyist of the manuscript according to its colophon was Prince Muṣṭafā, Murad III's son. However, this prince's pen-name was Muḥliṣī [Yurdaydın 1955:147]. Karabacek believed the author and copyist of cod. ÖNB H.O. 42a to be Süleymān's son Prince Muṣṭafā (executed 1553, see, e.g. [Ágoston 2009]), whose pen-name he also thought to be Ferdī [Karabacek 1917; see Yurdaydın 1955:141-142]. The assumption that the copyist of ÖNB H.O. 42a was this prince, however, was correct.

Here, in addition to the transliteration of the above-mentioned Persian poem, an English translation will be given. For its Persian text, see also [Yurdaydın 1955; Römer 1992, including a French translation]. The transliteration has been adapted to the Ottoman pronunciation of Persian. The metre of the poem is *mużāri* ‘(--v/-v-v/v--v/-v-), and its rhyme pattern is aaba cada. (Ottoman poetry uses two metric systems. Divan poetry has adopted and adapted the Arabo-Persian ‘*arūz*’ poetry, which takes into account the long and short syllables of Arabic and Persian words, whereas folk poetry uses Turkic syllabic metres).

şāhib kırān u husrev-u āfāk u dād-ger
zill-i zālī-i Haqq u şehinşāh-i bahr u ber
ten dāde rūzigār be-fermān-i ‘alīyeş
gerdūn be-ħaṭṭ-i emr-i şerīfeş nihāde ser
der devr-i ‘adl u re’fet-i ū der basī-i ħāk
hergiz ne-mānde est zi cevr ü sitem eşer
feryād cüz zi murğ-i çimen ber ney-āmede
ferdī ne-kerde çāk-i giribān meger seher

Lord of the fortunate conjunction, king of the horizons, just sovereign,
 Deep Shadow of God, King of Kings of the land and sea.
 Time has bowed before the [written] line of his exalted order.
 During the era of his justice and highness on the wide earth
 There has remained no trace of sufferance nor distress.
 No complaint has arisen but from the birds of the grassland.
 NOBODY has torn his collar but the morning.

In the margin next to this poem on fol. 6r, there is a remark written with black ink (see Fig. 4). The handwriting resembles the red handwriting on the second flyleaf and seems to be European as well, albeit very fluently written. The way this remark is formulated suggests a non-first-language speaker of Ottoman Turkish. Thus, *şāhib mü’ellif Ferdī ile taħalluş eder* ‘the owner author/the Lord author gives his pen-name as Ferdī’ or ‘The Lord author (= Mr. Author?) names himself by the pen-name of Ferdī’ is somewhat weird. Using the word *şāhib* ‘owner’ before the word *mü’ellif* ‘author’ seems most unusual. The verb *taħalluş etmek* ‘to give one’s *maħlaş*’, i.e. one’s pen-name can occur with the postposition *ile* ‘with’ (see, e.g., [Yurdaydın 1955:137, note 2]). But the verb and the pen-name can also be combined without a postposition (see, e.g., [Kellner-Heinkele 1981:196]: *Medhī taħalluş eder* ‘He uses the pen-name of Medhī’). Yurdaydın discusses both the title on the second flyleaf and the poem. However, he only says that these notes must have been written by a different hand and have to be regarded as later additions. He does not dwell on the linguistic details of the remark on fol. 6r, nor does he suggest a European hand. On the other hand, he says that such remarks that were added later to many manuscripts often contain errors and mistakes [Yurdaydın 1955:137, note 2 and 142 with note 20].

As mentioned above, the first historian and orientalist who used cod. ÖNB H.O. 42a was Hammer, who had purchased it. His references to this manuscript in his footnotes [Hammer 1828] always contain the name of Ferdī, with the folio number following. Therefore, a strong suspicion has arisen that besides being the inventor of a fictitious Ottoman 16th-century historian using the pen-name of Ferdī, he may also have been the author of these two remarks. Thus, he then would be the one who first misunderstood the Persian poem.

European inks contain iron gall, Ottoman inks, however, mostly consist of soot and gum Arabic. There were several recipes, one of which foresaw that an earthenware pot was submerged in the soil and filled with linseed oil and a cotton wick. After the wick was lighted, a plate was held above it so that the soot could be gathered. Subsequently, the soot was scraped off the plate with a feather. The best gum Arabic came from the Sudan, followed by produce from Djidda. It was first cleaned with the help of a sieve and let clear until its texture was like honey. The longer this phase, the better the quality was. Subsequently, some other components like the peel of grenades were added. Eventually, it was mixed with the soot and beaten for some time, with a maximum of 100.000 beats according to one recipe [Kütükoğlu 1994:42-43].

In order to determine whether the writer of this marginal note and of the title on fol. 1r was a European, an analysis of the ink of the manuscript versus the inks of the remarks seemed useful.

Thus, it was a fortunate coincidence that during a project meeting in June 2018 of FWF Project P-30511 *The Oriental Outpost of the Republic of Letters. Sebastian Tegnagel (d. 1636), the Imperial Library in Vienna, and Knowledge about the Orient* (FWF Project P-30511)², a UV, VIS, NIR (ultra-violet, visible, near infra-red) Microscope³ was tried on some comments by Tegnagel in manuscripts that had belonged to him (Tegnagel was the second librarian of the Vienna Hofbibliothek and bought many manuscripts both for the library and for himself. His manuscripts went to the Hofbibliothek after his death [Flügel 1865:Introduction; see also Römer 1998]). Spontaneously during the meeting, it was decided to apply this UV, VIS, NIR Microscope to cod. ÖNB H.O. 42 as well.

This present author's thanks go especially to Hülya Çelik of the Tegnagel project for having brought the microscope and for the permission to use it, as well as to Katharina Kaska of the Manuscript collection of the Austrian National Library for bringing the manuscript to the meeting, which was held in the old reading room of the Manuscript collection.

As a first step the following places in cod. ÖNB H.O. 42 were photographed:

- 1) The title written with red ink on fol. 1r. It vanished nearly completely under near infrared wavelengths, which can penetrate coloured layers as well as iron gall inks, with only a faint shadow being still discernible (Figs. 5a-c).
- 2) The marginal note on fol. 6r next to the "Ferdī" poem. The black ink was visible under all wavelengths, meaning that there possibly is no iron gall ink involved and that the ink may contain carbon/soot. (Figs. 6a-c).
- 3) Hammer's seal. The black ink used for imprinting the seal onto the paper stayed visible under all three wavelengths, meaning that Hammer may have used an ink containing carbon/soot for applying his Oriental seal (Figs. 7a-c).
- 4) The earlier owner's remark. Its black ink remained visible under all three wavelengths as well (Figs. 8a-c). This was a result that was expected, given that Oriental inks normally are composed of soot and gum Arabic.

As a consequence, it becomes clear that the red ink, as was expected, contains pigments that can be penetrated by near infrared wavelengths. All the black inks could be soot inks, although there still is a possibility that they may contain iron gall, which could not be detected by the microscope used here. For, depending on their composition, iron gall inks become transparent at a range between 1000 and 1200 nm, whereas soot inks/carbon inks appear black as they "absorb the infrared light across the entire mid-infrared range" [https://www.manuscript-cultures.uni-hamburg.de/lab_methoden.html], retrieved August 25, 2019].

Thus, so far only very cautious conclusions can be drawn, namely that Hammer may have used soot ink for applying his seal onto cod. ÖNB H.O. 42a. This present author's thanks go to Ira Rabin, Hamburg, for her helpful remarks during the discussion after the paper had been read during the CHNT 23 conference.

The following further investigations will have to be carried out in order to gain more insight:

- 1) If one wants to find out whether Hammer regularly used soot ink when putting his Oriental seal on his own manuscripts, some more of them, especially those of the H.O. series, ought to be investigated.
- 2) The supposition that a European hand might have written the marginal note on fol. 6r next to the "Ferdī" poem (as well as the title on the second flyleaf) has not been falsified so far. With Hammer himself perhaps being at the beginning of the "Ferdī" myth, one might go a step further and suggest that the author of the marginal note on fol. 6r may have been Hammer as well, a supposition that is impossible to prove without the help of more refined methods. Unfortunately and curiously, there does not seem to be any known specimen of Hammer's Arabic handwriting. Therefore, a comparison of the exact chemical composition of the inks used for this marginal note and for Hammer's seal would be ideal.
- 3) In order to exclude that the marginal note was written by the former owner of the manuscript, the chemical composition of its ink ought to be compared to the one of his note on fol. 1r.

² <https://geschichtsforschung.univie.ac.at/forschung/oorpl/>

³ https://www.manuscript-cultures.uni-hamburg.de/Poster/Z02_A4_P2.pdf

- 4) As a complement to these investigations, the composition of the red ink of the title given on the second flyleaf should also be analysed. It will be of special interest to find out the reason for the faint shadow of the text that is visible in Fig. 5c and to identify the chemical element(s) responsible for it.

It is not yet clear when these investigations will be made possible. Once permission is given by the Austrian National Library, the analyses suggested above will be carried out by the Institute of Natural Sciences and Technology in the Arts⁴ within the framework of the activities of the “Centre of Image and Material Analysis in Cultural Heritage” (CIMA)⁵. More specifically, in order to identify the pigments and the chemical elements the inks are composed of, the following non-destructive and non-invasive methods will be applied:

- 1) “X-ray fluorescence analysis” (XRF) will be used to determine the chemical elements the inks consist of.
- 2) RAMAN Spectroscopy will yield another set of data for comparison with the results of the XRF analysis.
- 3) “Infrared Reflectography” (IRR) has the advantage that wavelengths between 900 and 1700 nm give better results than IR photography at shorter wavelengths does. This means that maybe some of the other samples might prove to contain iron and become transparent.

If the inks of Hammer’s seal and the marginal note on fol. 6r turn out to be the same, the author of the “Ferdī” myth will have been found. If, on the other hand, no identity or similarity can be discerned, Hammer’s authorship will neither be falsified nor proven.

FIGURES

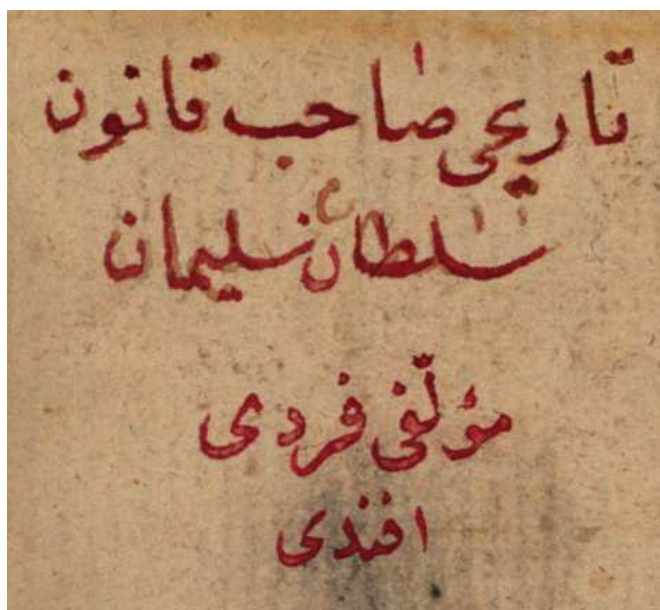


Fig. 1. Cod. ÖNB H.O. 42a⁶, flyleaf no. II

⁴ <http://www.fch.akbild.ac.at/>, retrieved February 16, 2019.

⁵ <https://hrsml.cvl.tuwien.ac.at/>, retrieved February 16, 2019.

⁶ <http://data.onb.ac.at/rep/10002344>



Fig. 2. Cod. ÖNB H.O. 42a⁷, fol.1r; purchaser's seal and remark



Fig. 3. Cod. ÖNB H.O. 42a⁸, fol.1r; Hammer's Oriental seal.

⁷ <http://data.onb.ac.at/rep/10002344>

⁸ <http://data.onb.ac.at/rep/10002344>



Fig. 4. Cod. ÖNB H.O. 42a⁹, fol.6r; “Ferdī” poem with marginal note

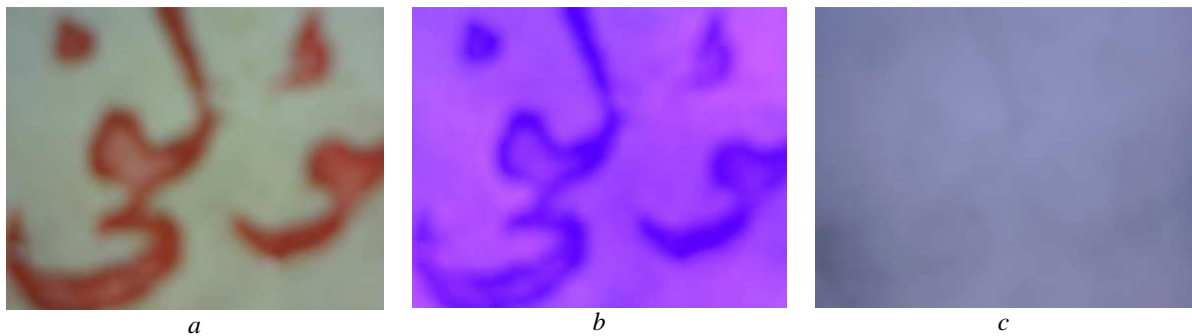


Fig. 5. Cod. ÖNB H.O. 42a¹⁰, flyleaf no. II, title, a) visible; b) ultraviolet; c) near infrared

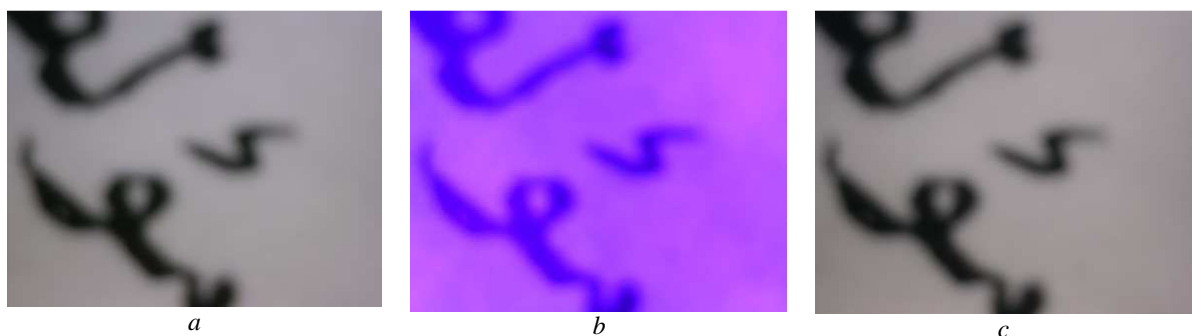


Fig. 6. Cod. ÖNB H.O. 42a¹¹, fol.6r, marginal note next to “Ferdī” poem, a) visible; b) ultraviolet; c) near infrared

⁹ <http://data.onb.ac.at/rep/10002344>

¹⁰ <http://data.onb.ac.at/rep/10002344>

¹¹ <http://data.onb.ac.at/rep/10002344>

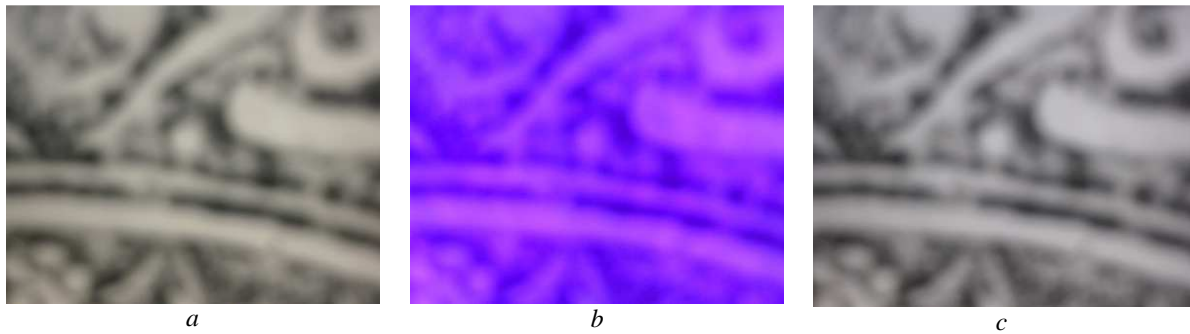


Fig. 7. Cod. ÖNB H.O. 42a¹², fol. 1r; Hammer's Oriental seal, a) visible; b) ultraviolet; c) near infrared

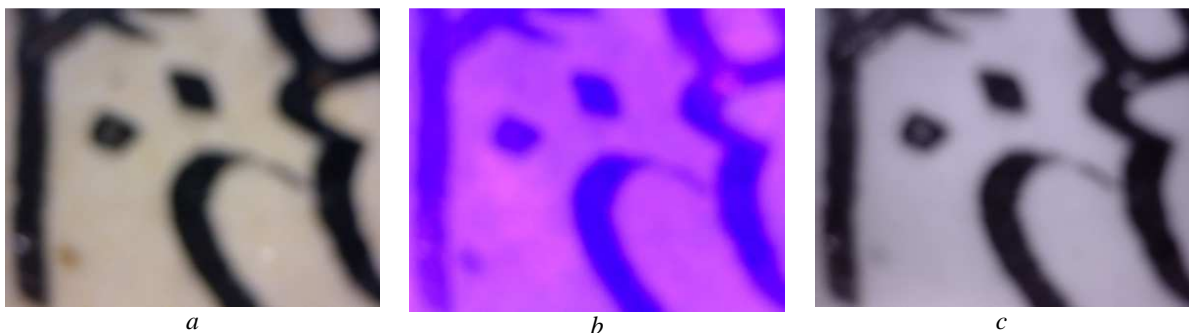


Fig. 8. Cod. ÖNB H.O. 42a¹³, fol. 1r, former owner's remark, a) visible; b) ultraviolet; c) near infrared

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¹² <http://data.onb.ac.at/rep/10002344>

¹³ <http://data.onb.ac.at/rep/10002344>

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