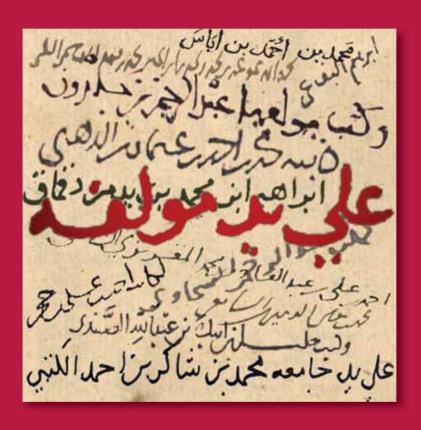
### In the Author's Hand

Holograph and Authorial Manuscripts in the Islamic Handwritten Tradition



EDITED BY
FRÉDÉRIC BAUDEN & ÉLISE FRANSSEN

In the Author's Hand

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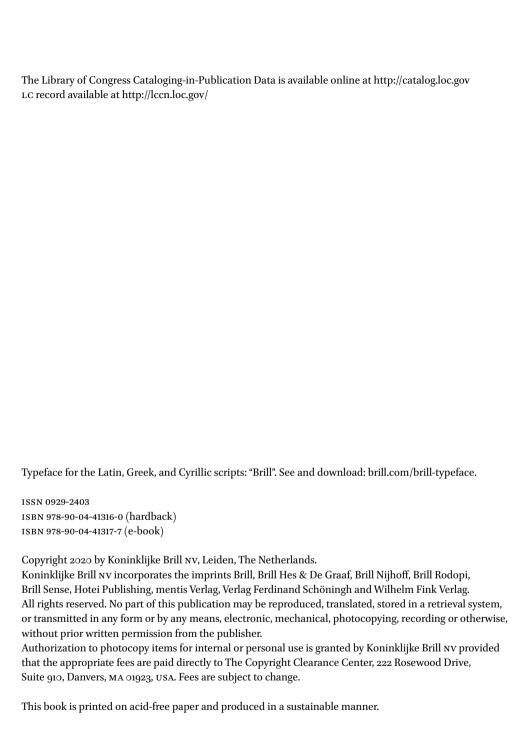
### In the Author's Hand

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#### **Preface**

This volume is the material achievement of an international conference entitled *Autograph/Holograph and Authorial Manuscripts in Arabic Script* that took place at Liège University on 10–11 October 2013. At the conference, seventeen participants gathered to share best practices and to think collectively about the issues raised by these specific manuscripts, that is, the autograph, holograph, and authorial manuscripts. Next to the necessary theoretical frame, we focused on the practical approach to the manuscripts.

Indeed, research specifically dealing with holograph, autograph, or authorial manuscripts in Arabic script is often unplanned and erratic. Nevertheless, these manuscripts raise numerous important questions of interest to a variety of disciplines, such as paleography, codicology, textual criticism, linguistics, and intellectual history (working methods and methodology). These disciplines pose questions such as:

- How can we identify handwriting with a degree of scientific confidence, beyond intuition?
- What are the discriminating criteria? Is there a method to be used/developed?
- Can these books be analyzed like other manuscripts?
- What kinds of information do their specific characteristics offer?
- How important is this category of manuscripts in an editorial process?
- When more than one authorial manuscript of the same text is available, how should we choose the one to use in an editorial process?
- What importance should we give to the status of a manuscript—fair copy, draft, copybook, notebook, etc.—and how should we classify these versions?
- How could holographs improve our knowledge of Arabic?
- What information can we deduce from different authorial versions of the same text?
- What about originality, plagiarism, or even authority?

Among these issues, paleography is particularly significant. In the field of Islamic manuscripts studies, handwriting identification is still a question of experience: experienced scholars can recognize one handwriting at first glance, but no one teaches how to do this. Paleography courses deal with the deciphering and dating of handwritings, not with the specific characteristics that are personal to the scribes, with the only exceptions being some renowned calligraphers or some handwritings in old Qur'āns. There is no study of informal handwritings or scholars' hands, and even fewer courses about them. Since both of us are working on a celebrated scholar—respectively al-Maqrīzī (d. 845/1442)

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and al-Ṣafadī (d. 764/1363)—or on a particular manuscript tradition whose origin is related to a given person—the Egyptian recension of the *Thousand and One Nights*—, accurate and efficient handwriting identification is crucial for our research work.

We organized this conference because we wanted to think collectively, to give space and time to questions, to share knowledge and experience, discussions, and debate, but also to cross the usual boundaries marking the various fields. Hence, the conference convened not only renowned researchers in Arabic manuscripts (literary, historical, philosophical, or encyclopedic manuscripts), but also specialists of ancient and Byzantine Greek documents, manuscripts, and papyri, and a judicial expert in handwriting identification. The latter delivered a very detailed and pragmatic speech about the methods applied in the legal community. The papers were distributed in five panels, dealing with terminology and methodology; codicology; working methods; paleography; and textual criticism, respectively. The conference discussions were extremely rich and these proceedings are their faithful reflection.

We would like to warmly thank all the participants to the conference and the members of the scientific and organizing committees: Cécile Bonmariage (Catholic University of Louvain-la-Neuve, Belgium), Yehoshua Frenkel (University of Haifa, Israel), Adam Gacek (formerly McGill University, Montreal, Canada), Retsu Hashizume (Chiba Institute of Science, Japan), Stephen Hirtenstein (Muhyiddin Ibn 'Arabi Society, UK), Caroline Macé (Catholic University of Leuven, Belgium), Marie-Hélène Marganne (Liège University, Belgium), Elias Muhanna (Brown University, USA), Nobutaka Nakamachi (Konan University, Kobe, Japan), Anne Regourd (CNRS, France), Kristina Richardson (Queens College, New York), Valentina Sagaria Rossi (Accademia Nazionale dei Lincei, Italy), Tilman Seidensticker (Friedrich-Schiller-Universität, Jena, Germany), Aida Shalar Gasimova (Baku State University, Azerbaijan), Suha Taji-Farouki (University of Exeter, UK), Anne-Marie Verjans (freelance researcher, Belgium), and Jan Just Witkam (formerly Leiden University, Netherlands). We also express our deepest gratitude to Professor Robert Wisnovsky (McGill University, Montreal, Canada) for sharing with us reproductions of manuscripts quoted by Adam Gacek in his article. Another special thank goes to the two anonymous reviewers whose remarks and critical comments were helpful.

Last but not least, the organization of the conference would not have been possible without the assistance and support of the personnel of Liège University Library, particularly the curator of the Department of Old Prints and Manuscripts, Cécile Oger, whose support was critical for the launch of the small exhibition of manuscripts especially organized on the occasion of the confer-

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ence. It is also our pleasure to acknowledge the financial and material support of the Faculty of Humanities and the Patrimoine of Liège University, as well as the Fund for Scientific Research (F.R.S.-FNRS, Fédération Wallonie-Bruxelles), without whom this conference could not have been organized.

Frédéric Bauden and Élise Franssen

## List of Authors' Handwritings Appearing on the Cover Image



Reading of the inscriptions: Ibn Iyās: Muḥammad b. Aḥmad b. Iyās; Ibn Fahd: Muḥammad al-madʿū ʿUmar b. Muḥammad b. Muḥammad b. Abī l-Khayr Muḥammad b. Fahd al-Hāshimī l-Makkī; al-Biqāʿī: Ibrāhīm al-Biqāʿī; Ibn Khaldūn: wa-kataba muʾallifuhā ʿAbd al-Raḥmān b. Khaldūn; al-Dhahabī: kātibuhu Muḥammad b. Aḥmad b. ʿUthmān b. al-Dhahabī; Ibn Duqmāq: Ibrāhīm b. Muḥammad b. Aydamur Duqmāq; al-Sakhāwī: Muḥammad b. ʿAbd al-Raḥmān al-Sakhāwī; al-Maqrīzī: Aḥmad b. ʿAlī b. ʿAbd al-Qādir b. Muḥammad al-Maqrīzī l-Shāfiʿī; Ibn Ḥajar: li-kātibihi Aḥmad b. ʿAlī b. Ḥajar; al-Damīrī: Muḥammad b. Yūnus al-Damīrī l-Shāfiʿī; al-Ṣafadī: wa-kataba Khalīl b. Aybak b. ʿAbdallāh al-Ṣafadī; Ibn Shākir al-Kutubī: ʿalā yad jāmiʿihi Muḥammad b. Shākir b. Aḥmad al-Kutubī.

Sources: al-Biqāʿī: MS Ayasofya 3139 (Süleymaniye Kütüphanesi, Istanbul); al-Damīrī: MS Ayasofya 4110 (Süleymaniye Kütüphanesi, Istanbul); al-Dhahabī: MS Ayasofya 3007 (Süleymaniye Kütüphanesi, Istanbul); Ibn Duqmāq: MS A2832 (TSMK, Istanbul); Ibn Fahd: MS Feyzullah 1413 (Milli Kütüphanesi, Istanbul); Ibn Ḥajar: MS Ayasofya 3139 (Süleymaniye Kütüphanesi, Istanbul); Ibn Iyās: MS Fatih 4197 (Süleymaniye Kütüphanesi, Istanbul); Ibn Khaldūn: MS 1936 (Atıf Efendi Kütüphanesi, Istanbul); Ibn Shākir al-Kutubī: MS A2922 (TSMK, Istanbul); al-Maqrīzī: MS Or. 560 (Universiteitsbibliotheek, Leiden); al-Sakhāwī: MS Ayasofya 3139 (Süleymaniye Kütüphanesi, Istanbul); al-Ṣafadī: MS Ayasofya 2968 (Süleymaniye Kütüphanesi, Istanbul)

#### **Notes on Contributors**

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(PhD 2007, HDR 2016) is Associate Professor at the University of Strasbourg. He has published a monograph (*Huit siècles de poésie chantée au Yémen. Langue, mètres et formes du* ḥumaynī, Presses Universitaires de Strasbourg, 2011) and articles on Yemeni poetry, Yemeni Arabic dialects and Modern South Arabian languages.

#### Élise Franssen

Ph.D. (2012), is Marie Skłodowska Curie Fellow at the Università Ca' Foscari, Venice (2018–21). A specialist of codicology, she is currently working on the holograph copy of al-Ṣafadī's *Tadhkira* and on her book on the manuscripts of the Egyptian recension of the *Thousand and One Nights*.

#### Adam Gacek

former Head of the Islamic Studies Library and Faculty Lecturer in Arabic manuscript studies at the Institute of Islamic Studies, McGill University (Montreal), is the author of many catalogues, articles and book chapters on Arabic and Persian manuscripts and printed rare books.

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#### Anne Regourd

Ph.D (1987), University of Copenhagen, Department of Cross-Cultural Studies, and CNRS. Her publications deal with codicology, catalography, paper studies, papyrology, and epigraphy. She worked extensively on Yemeni manuscripts, and more recently on Ethiopian manuscripts.

#### Kristina Richardson

Ph.D. (2008), University of Michigan-Ann Arbor, is Associate Professor of History at Queens College and the CUNY Graduate Center. She is the author of *Difference and Disability in the Medieval Islamic World* (Edinburgh University Press, 2012).

## Maqriziana xv: The Characteristics of al-Maqrīzī's Handwriting

Frédéric Bauden

Habet enim singularum ut vox ita manus quoque quiddam suum et peculiare

ERASMUS, De recta pronuntiatione<sup>1</sup>

• • •

Genuine handwriting had become the material embodiment of the immaterial spirit of the individual.

CHARTIER, From the author's hand 10

••

#### 1 Introduction

The identification of one of al-Maqrīzī's holograph manuscripts in the holdings of the Liège University was a key moment in my life as a researcher: its nature (a notebook) was an irresistible, though challenging, invitation to examine al-Maqrīzī's methodology as a scholar. Since then, I have devoted several studies to his working method and other issues related to his holograph manuscripts as well as his œuvre in general.<sup>2</sup> The discovery also led me to realize that, if al-Maqrīzī's works were largely available in print, sometimes with several editions for a single text, most editors did not rely on his holograph manuscripts despite

<sup>&</sup>quot;Just as individual voices differ, so does every handwriting have something unique about it". Erasmus, The right way 391.

<sup>2</sup> The following are among my works on al-Maqrīzī: al-Maqrīzī; Maqriziana I; Maqriziana II; Maqriziana IV; Maqriziana VIII; Maqriziana IX; Maqriziana X; Maqriziana XII; Maqriziana XIII; Maqriziana XIV; Taqī al-Dīn Aḥmad ibn 'Alī al-Maqrīzī; Vers une archéologie du savoir.

their huge number. Moreover, whenever some of these editors considered the holograph copy, they did not pay attention to al-Maqrīzī's editorial work (e.g., the nature and place of his corrections and emendations). This statement of fact induced me to conceive the *Bibliotheca Maqriziana* project, which aims to publish critical editions based on his holograph or authorial manuscripts (with a reproduction in facsimile) and takes into consideration al-Maqrīzī's editorial process and methodology as a copyist and an author. Each edition is accompanied by an annotated translation facing the Arabic text and a thorough study by a specialist of the field to which the edited text belongs.<sup>3</sup>

I identified al-Maqrīzī's notebook in 1997 in a fortunate stroke of serendipity. In April of that year, I attended an international conference in London. As usual, a few local institutions had displayed some of their most recent publications. Among them, the al-Furqān Foundation presented Ayman Fu'ād Sayyid's recently released edition of the draft of al-Maqrīzī's *al-Mawā'iz wa-l-i'tibār fī dhikr al-khiṭaṭ wa-l-āthār* (henceforth *al-Khiṭaṭ*).<sup>4</sup> The dust jacket of the book featured a leaf from the holograph manuscript on which the edition was made, while several additional leaves were reproduced on glossy paper at the end of the introduction. Passing by the table, I could not help but to be attracted to the image: it contained two elements that reminded me of a manuscript that I had catalogued in the collection of the Liège University a few years before.<sup>5</sup> The first, and most conspicuous given the size of the image, was a combination of two different handwritings: one line, written in large characters in a calligraphic style comparable to *thulth*, appeared in the middle of a text in smaller characters deftly arranged around the former.<sup>6</sup> The second element—in terms

The series is composed of two sections: the *Opera minora*, which includes al-Maqrīzī's opuscules on a wide variety of subjects, and the *Opera maiora*, which is devoted to al-Maqrīzī's major works. So far, three volumes have been published in the *Opera minora* section (see al-Maqrīzī, *Daw' al-sārī*; al-Maqrīzī, *al-Maqrīzī's Trakat*; al-Maqrīzī, *Caliphate and kingship*) and two volumes in the *Opera maiora* section (*al-Maqrīzī's al-Ḥabar*, vol. v, sections 1–2: The Arab thieves, and section 4: Persia and its kings). In addition to *al-Khabar 'an al-bashar*, the following major works are currently being edited and translated: *Itti'āz al-ḥunafā'*, *al-Sulūk*, and *al-Muqaffā*. For a similar approach regarding the medieval Jewish philosopher Maimonides, see Sirat and Di Donato, *Maïmonide*, which also includes an analysis of his handwriting by the expert in handwriting identification M.-J. Sedeyn.

<sup>4</sup> Al-Maqrīzī, Musawwadat.

<sup>5</sup> The handlist was published in 2017: Bauden, *Catalogue*. In a presentation of the most significant Arabic manuscripts preserved in Belgium (published in 1993, shortly after the cataloguing work was finished) and well before the identification of al-Maqrīzī's handwriting, I had correctly dated the manuscript to the ninth/fifteenth century and identified the place of production as Egypt. See Bauden, Les Manuscrits 151.

<sup>6</sup> It turned out that these inscriptions belong to Mamlūk chancery documents that al-Maqrīzī

of chronology too—that drew my attention was the particular handwriting of the person who penned the main text around the *thulth* inscription. Before I could say Jack Robinson, I had the intuition that a manuscript I had described in the catalogue in Liège a few years earlier was a holograph of al-Maqrīzī. Upon my return to Liège a few days later, with a copy of Sayyid's edition in hand, I went to the Manuscripts Reading Room and asked for MS 2232 (Lg).<sup>7</sup> The comparison of the two elements—the writings in larger characters and the handwriting around them—which were critical for the flash of remembrance led me to conclude that the manuscript in Liège was indeed a manuscript in al-Maqrīzī's handwriting and that it had the same characteristic as the draft of *al-Khiṭaṭ* edited by Sayyid: it was partly written on reused Mamlūk chancery documents.<sup>8</sup>

I am sharing the circumstances of this discovery for the first time for several reasons. First, the identification was the result of pure serendipity. Second, to emphasize the significance of visual memory; even after several years, I retained a recollection of the distinctive and critical features, and this allowed for an identification. Third, the identification was made possible through comparison (i.e., of the same kind of reused paper; handwriting). Fourth, to highlight that the identification was confirmed based on a philological analysis (a comparison of the contents of the notebook with al-Magrīzī's works). Indeed, comparison and philological analysis remain the main means of certifying that a manuscript is in the hand a specific scholar. In the mid-nineteenth century, when the Dutch scholar Reinhart Dozy (1820-83) wanted to establish that three volumes held in the collections of the University of Leiden (L1-3) were holograph copies of al-Maqrīzī's al-Tārīkh al-kabīr al-muqaffā (from now on al-*Muqaffā*), he used the same methods. He first noticed that the three volumes shared some characteristics, for example, numerous additions in the margins and on inserts were in the same handwriting as the main text, a feature the

reused as scrap paper. In my 1993 article, I referred to that by pointing out that the documents reused in the Liège notebook were from al-Ṣāliḥ Ismāʿīl's reign (743–6/1342–5). See Bauden, Les Manuscrits 151. On these documents, see Bauden, The recovery; id., Diplomatic entanglements; id., Yemeni-Egyptian diplomatic exchanges.

<sup>7</sup> Henceforth, I refer to al-Maqrīzī's manuscripts with the abbreviations listed in the appendix at the end of this chapter.

<sup>8</sup> I announced the discovery a year later with a paper entitled: À propos du ms. 2232 de l'Université de Liège: découverte d'un nouvel autographe d'al-Makrīzī?, which was read at the 7th International Colloquium on Egypt and Syria in the Fatimid, Ayyubid and Mamluk Eras (Leuven, 12–13 May 1998).

<sup>9</sup> The three volumes had already been identified as containing one of al-Maqrīzī's work. See Dozy, Découverte 9.

Leiden manuscripts shared with a copy of *al-Muqaffā* known to be a holograph (P).<sup>10</sup> At that time, there were only two ways to verify whether or not a manuscript was in the hand of a given scholar: to ask another person or institution to send a manuscript considered to be a holograph or to share a facsimile of a sample of the handwriting. Though the first option was still widely practiced until the beginning of the twentieth century, Dozy opted for the second option.<sup>11</sup> Dozy sent a facsimile to Charles Defrémery (1822–83), a French Orientalist who frequently reviewed Dozy's publications for the French audience. Defrémery, in turn, shared a facsimile of P. Both scholars reached the same conclusion, that the handwriting was identical. Dozy also confirmed that L1–3 and P were part of the same work, i.e., *al-Muqaffā*.

One last, and perhaps less expected, impact of my discovery relates to two additional holographs that have been identified since then.<sup>12</sup> Undoubtedly, the

<sup>10</sup> Dozy, Découverte 13-4.

<sup>11</sup> The color facsimile was reproduced by Dozy, Découverte, after p. 28, to permit the comparison with two other presumed holograph manuscripts held in Gotha (G1 and G2). See Dozy, Découverte 14.

<sup>12</sup> In this respect, it is worth mentioning that two of al-Maqrīzī's holograph manuscripts remained unnoticed for some time, though they had been described in old catalogues.

<sup>(1)</sup> The first one, Al, is now in the holdings of the Bibliotheca Alexandrina, which incorporated the collections of the Municipal Library (al-Maktaba al-Baladiyya), where the manuscript was previously preserved. It was first described in 1955 by al-Shandī, *Fihris* 15, under the title *Qiṭa' tārīkhiyya*. Al-Shandī identified the Ms as a holograph that corresponds to preparatory drafts (*musawwadāt taḥḍīriyya*) for *al-Tārīkh al-kabīr* (i.e., *al-Muqaffā*) and various notes on a wide range of topics that are briefly described in his catalogue. A few years later, the Institute of Arabic Manuscripts in Cairo microfilmed the most significant manuscripts in this library, including al-Maqrīzī's holograph. These were then described in the catalogue of microfilmed manuscripts published by the Institute: see *Fihris al-makhṭūṭāt al-muṣawwara*: *al-Tārīkh*, part 2, 165. This manuscript was first mentioned in a scientific publication in 1990: 'Izz al-Dīn 'Alī, *al-Maqrīzī* 76 (no. 39: *nubadh tārīkhiyya*) and Muṣṭafā, *al-Tārīkh al-ʿarabī* 3, 149 (no. 19: *nubadh tārīkhiyya*). After its incorporation in the Bibliotheca Alexandrina holdings, the manuscript was briefly described in Zaydān, *Fihris* 19 and 83–4 (no. 59). The manuscript is the subject of a thorough description in my Maqriziana VII.

<sup>(2)</sup> The second one, Da, is a manuscript that was first mentioned in the old catalogue of the Zāhiriyya Library in Damascus under the title *Dhikr binā' al-Ka'ba al-bayt al-ḥarām* and thereafter referred to in *GAL* ii, 675 (no. 17). In the subsequent years, it was mentioned in other Syrian catalogues like al-'Ishsh, *Fihris* 105 (*Binā' al-Ka'ba*) and al-Rayyān, *Fihris* 647. Though the volume opens with a text composed by al-Maqrīzī, entitled, as the title page witnesses, *al-Juz' fī binā' al-Ka'ba al-ḥarām*, it also contains some thirty additional leaves with his various notes that essentially make the whole volume another example of one of his notebooks. The manuscript was first mentioned in a study in 1990: Muṣṭafā, *al-Tārīkh al-'arabī* 3, 149 (no. 26: *Dhikr binā' al-Ka'ba wa-l-bayt al-ḥarām*).

notice has drawn the attention of scholars from around the world, and consequently increased their awareness of some of the above-mentioned features.

In a 2002 catalogue of a selection of manuscripts held at the National Library of Dushanbe (Tajikistan), the authors described a so far unnoticed holograph manuscript of al-Maqrīzī. It consists of selections ( $mukht\bar{a}r$ ) al-Maqrīzī took from Ibn Ḥabīb al-Ḥalabī's (d. 779/1377)  $Durrat\ al$ - $asl\bar{a}k\ f\bar{\iota}\ dawlat\ al$ - $Atr\bar{a}k$ , a chronicle of the Mamlūk sultanate from its beginning until the year 777/1375. In the colophon (fol. 179b), al-Maqrīzī specifies that he completed his work on Monday, 20 Rabī' I 824/25 March 1421. Thanks to this note, identifying this manuscript as a holograph was fairly straightforward for the cataloguers and it could be corroborated by consulting some reproductions of al-Maqrīzī's handwriting.

The next identification was made in 2010 at the University of Michigan (Ann Arbor). In April of the same year, Noah Gardiner, then a third-year graduate student taking part in the cataloguing of a poorly known collection of roughly 1,100 Islamic manuscripts, 14 started to look at Ms Isl. 605, identified on the title page as the third volume of al-Maqrīzī's *al-Khiṭaṭ*. Gardiner noticed that the manuscript was unusual because it included blank spaces in the text, probably left for later inclusions, in addition, there were several pasted-in inserts with additions in the manuscript's primary hand—both features that usually set off alarms for cataloguers. Just as Dozy had done in the mid-nineteenth century, Gardiner compared the manuscript's handwriting with the reproductions he found in some of my articles, and concluded that they were a perfect match, something that he asked me to confirm by sharing some pictures of the manuscript. 15

These stories tellingly illustrate that al-Maqrīzī's holographs are firstly identified on the basis of a personal impression. This personal impression is linked to one's ability to recognize specific physical characteristics (the presence of features commonly associated with drafts, reused chancery paper, handwrit-

<sup>13</sup> See Bahramiyān and Yūnus Āf, *Fihrist* 91. In 2006, the author published a short study about this manuscript: Bahramiyān, Atharī nāshinākhtah.

The catalogue as well as the digitization of the whole collection are now complete. It can be consulted online (https://search.lib.umich.edu/catalog?filter.collection=Islamic+ Manuscripts&filter.location=Special+Collections&library=All+libraries&sort=date\_asc).

The discovery was officially announced in the newsletter of the University of Michigan Department of Near Eastern Studies in August of the same year. The text is now available online (https://www.lib.umich.edu/international-studies/news/autograph-al-maqrizis-khitat-revealed-university-michigan-library). Subsequently, we published together an article presenting the finding and its significance for al-Maqrīzī's methodology. See Gardiner and Bauden, A recently discovered holograph fair copy.

ing). Several scholars are now able to establish, with some confidence, whether or not a handwriting is that of al-Maqrīzī. Nonetheless, even if they are convinced of the soundness of their expertise—and this is generally trusted—, they are hardly able to demonstrate that their identification is beyond doubt. As Colette Sirat put it: "It is obvious that one cannot *prove* that two texts were penned by the same hand. The only way to persuade other people that this is so is to *show* them, to give them the *feeling* that it is the same hand." <sup>16</sup> The only way to reach this goal is to objectivize, to distance onseself from the object because nothing is worse than the absolute desire to detect—sometimes at all costs—a scholar's handwriting on a manuscript.<sup>17</sup> One can rightly ask if it is really al-Maqrīzī's handwriting. The quantity of preserved material—some 5,000 leaves from twenty-five manuscripts<sup>18</sup>—and its variety (notebooks, sketches, drafts, fair copies), together with philological and paleographical analyses, are helpful to rule out the hypothesis that it could be in someone else's handwriting. Other features strengthen the assumption that a work could be that of al-Maqrīzī, for example, the way he writes his name on the title pages or in the colophons (the laqab is always neglected, as it should be) or includes an invocation after his name.<sup>19</sup> Al-Maqrīzī also left numerous consultation notes on manuscripts that he accessed for his work and these are useful for comparison.<sup>20</sup> Combined with other elements grasped from a codicological analysis, paleography allows scholars to develop great insight and enables them to accurately describe a handwriting and point to its idiosyncrasies. The contribution of other disciplines, fields, and techniques, like philology, expertise in handwriting, diplomatics and the digital humanities can only enhance the way we look at and describe a handwriting, and, can in fact, help us refine the analysis.

<sup>16</sup> Sirat, Writing 493 (author's emphasis).

See the interesting case reported by Griffel, Is there an autograph. The author shows that a license of transmission found at the end of a copy of al-Ghazālī's *al-Wajīz fī l-fiqh* preserved at Yale (Ms Landberg 318) and presented by the editors of one of his texts as a unique example of al-Ghazālī's handwriting is in fact a copy of an original found in another manuscript. Apparently the editors neglected the fact that the colophon of the manuscript is dated after al-Ghazālī's death (d. 505/1111): 570/1175 (not 507/1114 as Griffel reported on the basis of the cataloguer's reading (ibid., 174)). In any case, this means that, even though the editors wanted to see al-Ghazālī's hand in this license, the intention of the person who penned it was pure. For other examples, see chapter 3 in this volume.

<sup>18</sup> See next section.

<sup>19</sup> See chapter 3 in this volume, 72. As the author states, these elements are not definitive proof of the identification. They must be considered together with other external and internal elements.

<sup>20</sup> On these, see Bauden, Maqriziana XVIII. Once again, consultation notes can also be faked, but their number helps to dismiss such an hypothesis.

Why does it matter? The identification of al-Magrīzī's handwriting not only counts for the owners—nowadays usually public libraries—who can boast about a precious item, but first and foremost for the historian who wants to ascertain whose work he is considering and to know that the words he is reading were penned by this scholar. Even more importantly, an irrefutable identification also relates to consultation notes that a specific scholar left in the books he consulted and, sometimes, notes or even criticisms he jotted down in the books he read and excerpted passages from.<sup>21</sup> From the philological point of view, the editor needs to verify all the handwriting on the page; for instance, if a copyist copied a text of al-Magrīzī, but al-Magrīzī intervened in some way (an authorial manuscript), can the editor identify the hand of the copyist versus that of al-Maqrīzī.<sup>22</sup> These are critical matters for significant issues like the accusations of plagiarism raised by some of al-Maqrīzī's contemporaries. When I found twenty leaves in a different handwriting in one volume of his draft of al-Khiṭaṭ (IT2), I approached them in light of the words expressed by al-Maqrīzī's colleague and friend, Ibn Hajar (d. 852/1449), and later repeated by the latter's student, al-Sakhāwī (d. 902/1497), in which he stated that al-Maqrīzī had taken advantage of his colleague and neighbor's manuscript and had appropriated it. The neighbor in question was al-Awhadī (d. 811/1408), who had been working for years on a book detailing the history of the city of Cairo from an architectural point of view. According to al-Sakhāwī, al-Awḥadī's manuscript was in part a fair copy and al-Magrīzī, added material to it, greatly expanding the original work, but essentially availed himself of the work without naming its original author. I resorted to a paleographical and philological analysis in order to demonstrate that the hand that penned the twenty leaves still found in al-Maqrīzī's draft was that of al-Awḥadī.<sup>23</sup> Al-Awḥadī's handwriting is preserved in just a few consultation notes jotted down on the title pages of books he consulted for his work or in ownership marks. Enough specimens have been preserved to allow a fair comparison, though the size of these specimens, by definition, is limited.<sup>24</sup> The study of the text also revealed that al-Maqrīzī could not have written it because the author of the lines described some persons

<sup>21</sup> On this, see Bauden, Magriziana XVIII.

This is particularly true for the edition of his opuscules preserved in L5, most of which are in someone else's hand but revised by al-Maqrīzī. See Bauden, *Al-Maqrīzī's collection*, as well as the opuscules so far published in the *Bibliotheca Maqriziana*: al-Maqrīzī, *Daw' al-sārī*; al-Maqrīzī, *Al-Maqrīzī's Traktat*; al-Maqrīzī, *Caliphate and kingship*.

<sup>23</sup> See Bauden, Maqriziana IX.

In the case of the consultation notes, they include his name, the place where he read the text, and the date. The note is introduced by a verb that indicates the nature of the

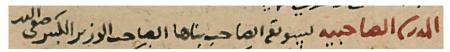


FIGURE 5.1 Handwriting identified as al-Awḥadī's (MS Emanet Hazinezi 1405, fol. 83b) ISTANBUL, TSMK

### لشبع بطنى والعلقية رجلا مقلت لما يسورة فالسول البارة

FIGURE 5.2 al-Maqrīzī's handwriting at the age of 28 (MS Murat Molla 575, fol.  $3^{\rm b}$ ) istanbul, süleymaniye kütüphanesi

as his masters, some people with whom al-Maqrīzī never studied. Despite the evidence presented, Ayman Fu'ād Sayyid, the editor of *al-Khiṭaṭ*, rejected the identification of al-Awḥadī's handwriting (see fig. 5.1), instead, he considered it to be al-Maqrīzī's handwriting and explained the large number of discrepancies between the two hands as due to the fact that that part of the manuscript was penned in his youth, as witnessed, for instance, by IM, copied when al-Maqrīzī was twenty-eight years old (see fig. 5.2).<sup>25</sup>

consultation, i.e., if he only read it, or read it and took notes. Since the publication of my Maqriziana IX, I have identified two additional marks: one consultation note and one ownership mark.

Fu'ād Sayyid, al-Maqrīzī 90-1. A comparison between these handwritings cannot be tack-25 led in the framework of this study (nevertheless, see below, 196, for at least two discrepancies). This issue will be scrutinized in a forthcoming study devoted to al-Awhadī and his book. However, I can certainly respond to the issue of the masters. Fu'ad Sayyid tried to invalidate my argument by demonstrating that the two masters with whom al-Maqrīzī did not study were in fact part of his curriculum. Unfortunately, with regard to the first master, he cites a name that I specifically indicated as having been al-Maqrīzī's master (al-Bulqīnī; see Bauden, Maqriziana IX 184). Regarding the second master (al-Bilbaysī), he refers to two places (there are in fact three) in the Khiṭaṭ where al-Maqrīzī characterizes him as shaykhunā. As for the first two places (al-Maqrīzī, al-Mawā'iz wa-l-i'tibār, Fu'ād Sayyid ed., iv/2, 582 and 677), the passages appear in the twenty leaves that I identified as being in al-Awḥadī's hand. Al-Maqrīzī left out both passages in his final version (for the first see, al-Maqrīzī, al-Mawā'iz wa-l-i'tibār, Būlāq ed., ii, 394; for the second, al-Maqrīzī ignored the whole entry for the *madrasa*). Finally, the third quotation (al-Maqrīzī, *al-Mawā'iz wa*l-i'tibār, ed. Fu'ād Sayyid, iv/2, 729) is found in al-Maqrīzī's hand in the first version of the Khiṭaṭ (1T2, fol. 111b), but al-Maqrīzī cancelled it in his final version too (ibid., Būlāq ed., ii, 415). This final passage is further proof that the first version of the Khiṭaṭ is largely a fair copy of al-Awḥadī's text, as I suggested in Bauden, Maqriziana IX 209-12. Al-Maqrīzī faithfully copied al-Awḥadī's text (mostly a draft), and even included personal particulars that could only be related to al-Awhadī. He only left out these particulars after he expanded the original text.

Before addressing al-Maqrīzī's handwriting in the framework of a fact-based and empirical analysis, I first consider elements that may have impacted his way of writing. First, I outline the main facts related to his life and his output as a scholar, I then detail the quantity, the quality, and the variety of the corpus constituted by the holographs preserved, particularly those aspects that are germane to a paleographical study. Finally, I tackle the issue of al-Maqrīzī's training in writing and, probably, in calligraphy.

#### 2 A Prolific Author and Copyist<sup>26</sup>

Born in 766/1364-5 in the Barjawan quarter of the Fatimid district of Cairo, Ahmad b. 'Alī b. 'Abd al-Qādir al-Maqrīzī (d. 845/1442) was raised in a family of scholars on his father's and mother's sides. After moving from Damascus, where he was born, to Cairo, al-Maqrīzī's father (d. 779/1378) cultivated a strong relationship with one of the most influential amirs of that time in the capital; thus, he secured his nomination to a position of secretary at the chancery. Married to the daughter of a prominent scholar, Ibn al-Ṣā'igh (d. 776/1375), al-Maqrīzī's father also took advantage of his father-in-law's standing and favor at court, as the latter had the privilege, in his capacity as *muftī*, of sitting at the supreme court at the citadel. Even though al-Maqrīzī lost his maternal grandfather and his father when he was barely a teenager, he continued his education in the religious sciences, until he reached his majority and received his first positions. In his early twenties, treading in his father's steps, he joined the chancery as a secretary, then started a career in the judiciary, and occupied various positions, like market inspector (muhtasib). During these years, he enjoyed a privileged relationship with the military and ruling elite. In his early fifties, he decided not to run for office and to retire from public service to devote himself entirely to writing, especially the history of his homeland, Egypt.<sup>27</sup>

In some fifty years of scholarship, al-Maqrīzī produced some of the most significant works ever written in the field of history, covering the full span of time, from the pre-Islamic period to his own time. His interests covered a wide range of disciplines, from economy to law and  $had\bar{\imath}th$ , from metrology to gemmology, and other fields. According to his own testimony, his works  $(mu\$annaf\bar{a}t)$  exceeded two hundred large volumes. <sup>28</sup> The adjective "large"  $(kib\bar{a}r)$  implies

<sup>26</sup> For al-Maqrīzī's life, see Bauden, Taqī al-Dīn Aḥmad ibn 'Alī al-Maqrīzī 161–7.

For a similar pattern regarding al-Nuwayrī—this is clearly not a topos—, see chapter 6 in this volume.

<sup>28</sup> Al-Sakhāwī, al-Daw'al-lāmi'ii, 23.

at least 200-250 leaves—the average number of leaves in the preserved holograph manuscripts of his personal works—, which means that he would have copied between 40,000-50,000 leaves. In total, including his drafts and notebooks, he must have penned over 100,000 leaves.<sup>29</sup> As al-Sakhāwī stressed, al-Maqrīzī wrote copiously in his own hand ( $khaṭṭa\ bi-khaṭṭihi\ l-kath\bar{\imath}r$ ); $^{30}$  the remains of his writing activity corroborate this: among the twenty-five volumes, representing the various stages of his scholarship (drafts, fair copies, notebooks, summaries), twenty-four are holographs.<sup>31</sup> In sum, al-Magrīzī controlled the whole process of creation, from reading, excerpting, and summarizing sources to drafting and preparing the fair copy of his works. One exception relates to his collection of opuscules (MS L5), composed at various periods in his life, which he gathered toward the end of his life and gave to a scribe whom he probably hired to prepare a fair copy of them. The reason behind this exceptional behavior is clear if we note his activities at that time: he was too busy with his last major work to copy the opuscules himself.<sup>32</sup> Al-Magrīzī indeed devoted himself to voluminous works. Those works that have reached us include, by order of size: al-Muqaffā (sixteen volumes), Imtā' al-asmā' (six volumes), al-Khabar (six volumes), al-Sulūk (five volumes), al-Khiṭaṭ (four volumes), and Durar al-'uqūd al-farīda (four volumes), i.e., forty-one volumes in all.<sup>33</sup> Each of these works also involved at least two stages: a rough draft or first version, and a fair copy or last version. Of this prolific activity, about 5,000 leaves have been preserved, representing only the tip of the iceberg.

On the writing pace in general, see Déroche, Copier des manuscrits. For the specific case of al-Nuwayrī, see chapter 6 in this volume. In his biography of his master Ibn Ḥajar (*al-Jawāhir wa-l-durar* i, 167–9), al-Sakhāwī reports (under the heading "the hurriedness of [Ibn Ḥajar's] nevertheless nice handwriting" [sur'at al-kitāba ma'a ḥusnihā]) several anecdotes related to his master's prowess as a copyist.

<sup>30</sup> Al-Sakhāwī, al-Daw' al-lāmi' ii, 22.

<sup>31</sup> For the list of al-Maqrīzī's holograph and authorial manuscripts, see the appendix at the end of this chapter.

The collection of opuscules was copied by the scribe before Shaʿbān 841/February 1438, which is when al-Maqrīzī started to revise the scribe's work. At that time, al-Maqrīzī was trying to complete *al-Khabar 'an al-bashar*, a six-volume work devoted to the history of humankind before Islam. See Bauden, Maqriziana xiv; id., *Al-Maqrīzī's collection*.

With the exception of *al-Khabar*, the information regarding the number of volumes for each work is given by the Meccan historian Ibn Fahd (d. 885/1480), who studied with al-Maqrīzī and read his books during his last two pilgrimages to Mecca (834–5/1431 and 838–40/1435–6). See Ibn Fahd, *Muʿjam al-shuyūkh* 66. For *al-Khabar*, Ibn Fahd refers to two volumes because at the time of al-Maqrīzī's last pilgrimage the work was not yet complete. It now stands at six volumes, of which five holograph volumes have been preserved (see appendix: 1A, IF1, IF2, IF3, IF4).

#### 3 A Dated/Datable and Mixed Corpus

These leaves provide us with unique material, both in terms of chronology and variety. The corpus is indeed helpful to characterize al-Maqrīzī's handwriting as it covers a period of some fifty years, i.e., the majority of his life as a scholar, starting in 795/1392–3, when he was twenty-eight years old, and ending with the year of his death in 845/1442 at the age of seventy-seven. In fig. 5.3, I present a timeline of his holograph and authorial manuscripts. This timeline helps to visualize the periods when al-Maqrīzī completed some of these copies.<sup>34</sup> The dating, whether it is precise or estimated, is based on several internal and external elements. In the case of the independent summaries<sup>35</sup> (*C*, Du, IM), al-Maqrīzī revealed in the colophon the precise date of the completion of his work.

In other cases, the analysis of al-Maqrīzī's working method allows me to state that whenever he consulted and took notes from a source, he added a consultation note in the source manuscript, stating that he had taken advantage of it (istafāda minhu), by which he meant that he took notes from it, or that he prepared a summary ( $intaq\bar{a}$ ) (see fig. 5.4).<sup>36</sup> These notes are critical to date other summaries for which al-Maqrīzī neglected to write a colophon as well as some parts of his works that are based on material he selected from his summaries. For example, as his consultation note attests (see fig. 5.4), he read and prepared a résumé of Ibn Fadl Allāh al-'Umarī's (749/1349) Masālik al-abṣār in 831/1427— 8. Some parts of this résumé are now found in one of his notebooks (Lg).<sup>37</sup> The study of these résumés demonstrates that they were made by al-Maqrīzī on the spot, i.e., while reading the source, <sup>38</sup> a method that we can now assume he used for his résumés of other sources. In the case of *Masālik al-absār*, the résumé can thus be dated accordingly, i.e., to 831/1427-8, which corresponds to the date he consulted this source (see fig. 5.4). Moreover, al-Maqrīzī sometimes reused the material selected in his résumés in his own works. In such cases, the relevant

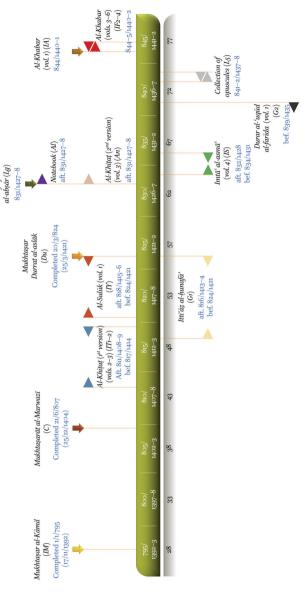
I must stress that this timeline does not attempt to date the point when al-Maqrīzī started to compose these books. This is a different issue that I hope to tackle in the future.

<sup>35</sup> By independent summaries, I mean those that stand as a single unit in one volume, that is, not those found in al-Maqrīzī's notebooks. In the case of the notebooks, al-Maqrīzī does not say when he completed the summary.

Bauden, Maqriziana II 72–3. Since this article was published, eight additional consultation notes have been identified and must be added to the list of consultation notes (twenty-five volumes representing seven works) found in appendix 2 of that study (ibid. 117–8). These consultation notes will be the subject of my Maqriziana XVIII.

<sup>37</sup> Bauden, Maqriziana I-1 63-4; Bauden, Maqriziana I-2 135.

<sup>38</sup> Bauden, Maqriziana 11 60-7.



Summary of Masalik

FIGURE 5.3 Timeline of al-Maqrīzi's holograph and authorial manuscripts

was dated by al-Maqrīzī in the colophon or can be dated precisely thanks to other factors (e.g., (according to CE years) beneath each reference point. An arrow indicates that the manuscript titles between flags are tentative and based on data collected either in the manuscript or elsewhere (e.g., a dated consultation note of a source on which the work is based). For the details Note: The timeline is divided in periods of five hijra years with indications of al-Maqrīzī's age date of consultation notes of the source on which the summary is based). The dates of the that are useful to fix termini ante quem and post quem, see the appendix.

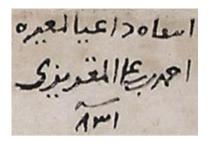


FIGURE 5.4

Al-Maqrīzī's consultation note in Ibn Faḍl Allāh al-ʿUmarī's Masālik~al-abṣār, vol. 3 (Ms Ayasofya 3416, fol. 1ª)

Note: It reads: intaqāhu dāʻiyan li-muʻīrihi / Aḥmad b. ʿAlī l-Maqrīzī / sanat 831.

ISTANBUL, SÜLEYMANIYE KÜTÜPHANESI

sections in these works can also be dated appropriately, like the section on the Mongol  $Y\bar{a}sa$  (book of laws) in al-Khitat, which is taken entirely from  $Mas\bar{a}lik$  al- $abs\bar{a}r$  via the résumé found in Lg. <sup>39</sup> The last version of al-Khitat, represented by a single manuscript (An), which includes the relevant section, was thus written down after 831/1427–8, most probably shortly after that date.

Al-Maqrīzī's reuse of chancery documents is also helpful to place his manuscripts—in full when the whole manuscript is made of the same document or, when that is not the case, some sections of it only—on the timeline when the original documents can be reconstructed and dated.<sup>40</sup>

In other circumstances, the holograph manuscripts can be dated based on an internal reference, like vol. 1 of *al-Khabar* (IA), where al-Maqrīzī specifies that a practice he describes in his text is contemporaneous, i.e., in 844/1440–1.<sup>41</sup>

The variety of the corpus is also quite uncommon. Al-Maqrīzī's writing activity represents all the circumstances by which a writer commits to paper his or someone else's words, i.e., a combination of the activity of a writer and a copyist. As a writer composing his own work—in his particular case, given that he was mostly a compiler, his work was based on information he gathered from sources in résumés and notebooks—, his first sketches are the result of a cre-

<sup>39</sup> On this see, Bauden, Trusting the source.

A section of *al-Khabar* (the one on Alexander the Great and Aristotle; IF3, fols. 115<sup>a</sup>–31<sup>b</sup>) could only have been composed after 819/1416–7, as it was penned on a document that reached Cairo that year. In this case, it is clear that al-Maqrīzī took that section from a previous work, presumably lost, as it fitted well in *al-Khabar*, which is dated to the years 844–5/1440–2. It partly relies on a résumé al-Maqrīzī made based on Ibn Abī Uṣaybi'a's (d. 668/1270) '*Uyūn al-anbā*', which is preserved in Lg (unfortunately undated). Part of the same text had already been used in *al-Khiṭaṭ*. The difference between the handwriting of this section on Alexander the Great and that of the remainder of the manuscript also confirms that it was penned earlier in al-Maqrīzī's life. See Bauden, Maqrīziana I–1 29–33; al-Maqrīzī, *Al-Maqrīzī's al-Ḥabar* 5/4, 10–1, 399–434. For the reconstructed document, see Bauden, Yemeni-Egyptian diplomatic exchanges.

<sup>41</sup> See Bauden, Maqriziana xIV.

ative process in which he chose his words and rephrased his source, if any. As a copyist preparing a fair copy from his drafts, he paid attention to every word and collated the result to ascertain that he did not make mistakes typical of copyists (*saut du même au même* and homeoteleuton being the most frequent phenomena). The aspects of the composition and copy usually indicate the various circumstances that may influence a scholar's handwriting.

The corpus is representative of those diverse circumstances in many respects. Some manuscripts correspond to summaries based on sources that al-Maqrīzī consulted. I have established, through an analysis of his working method, that the summarizing process was taking place while he was reading.<sup>42</sup> As indicated, his summaries can be found in independent volumes or were inserted in notebooks, depending on their size. Other manuscripts may contain first sketches of his personal works. These first sketches may be the result of his personal testimonies collected over time and compiled to create a text that he jotted down in a single moment. These first sketches are typically found in his notebooks and on slips of paper inserted in his fair copies. In other cases, the manuscript is already the result of a rough draft that was copied into a neater copy, which he still intended to emend and enlarge.<sup>43</sup> Medieval authors usually referred to these copies as drafts (musawwada or muswadda).44 However, the fair copy (*mubayyaḍa* or *mubyaḍḍa*) rarely remained fair: authors continued to modify their texts with rewordings, additions, corrections, cancellations, etc. All of al-Maqrīzī's manuscripts that can be described as fair copies are full of such alterations, including pasted inserts and replaced leaves. Even the evidence left by al-Maqrīzī that he collated the copy is not a sufficient distinction because this evidence does not always appear, particularly in the final version.<sup>45</sup> In conclusion, most, if not all, of his manuscripts that consist of copies of his personal works must be regarded as fair or working copies; al-Maqrīzī's later revisions do not change their status as fair or working copies.<sup>46</sup>

<sup>42</sup> See Bauden, Maqriziana 11 113.

This is typically the case of IT1 and IT2 (two volumes containing parts of *al-Khiṭaṭ*), a copy of a previous rough draft attributable to al-Awḥadī. We know that al-Maqrīzī knew that this was not the definitive fair copy because he recycled chancery scrap paper for both these volumes.

<sup>44</sup> See chapter 3 in this volume.

Al-Maqrīzī uses the word *balagha* (for *balagha muqābalatan*, "he reached [this place] in the collation") in the following manuscripts: IA, IF1, IF2, IF3, IF4, IY, IT1, IT2. This phrase does not appear in An, G1, G2, and IS, which should nevertheless be considered fair copies. Note that these collation notes were usually in the margins (inner or outer), in most cases close to the edge, and they were trimmed when the manuscript was bound. On these collation notes, see Bauden, *Al-Maqrīzī's collection*.

See Sirat, Writing 479; Bauden, Maqriziana x-1. In the case of al-Maqrizi, we know that the

All in all, with the exception of the first sketches, the majority of al-Maqrīzī's manuscripts may be characterized as copies, as they are the result of a writing activity that was a process of copying: his eyes moved from the text he was copying to the blank page where he wrote it.

#### 4 Al-Maqrīzī's Training in Writing and Calligraphy

The training that al-Maqrīzī received in his younger days is another factor that must be taken into consideration. As noted by paleographers and handwriting specialists, children who are trained as scribes and taught to write usually adopt common shapes that were elaborated and taught over the course of centuries. Furthermore, in modern times, it has been demonstrated that children who are first taught how to write with unconnected letters in the Latin alphabet develop cursive handwriting between the ages of 7 and 15, when the need to write more quickly arises. It is also during this period that children develop idiosyncratic shapes that diverge from the standard models they were taught when they were young. These idiosyncrasies are among the elements that make their handwriting personal; therefore, in this respect, it is worth investigating whether or not al-Maqrīzī received a specific education and how it might have impacted his handwriting.

Despite al-Maqrīzī's fame and in comparison with some of his contemporaries like Ibn Ḥajar, little is known of al-Maqrīzī's primary education, aside from the fact that his maternal grandfather mainly took care of it.<sup>49</sup> Born in a propitious context—into a family of scholars on both his mother's and father's sides—, al-Maqrīzī went through the classical education of that time which began with memorizing the Qur'ān at the age of four or five.<sup>50</sup> Reading and writing the holy text were also part of the curriculum.<sup>51</sup> Before reaching puberty

final fair copy was produced by a copyist based on al-Maqrīzī's working copy that corresponded to the last stage of his work. This corresponds to the moment when the work was published, i.e., made public.

<sup>47</sup> Beit-Arié, Stéréotypies 201–2, speaks of the Hebrew tradition and also stresses that the would-be scribe would imitate his master's handwriting until his own writing matches it, thus the student reproduces what becomes a standardized handwriting.

<sup>48</sup> Wing, Étude 134.

<sup>49</sup> Ibn Ḥajar, *Inbā' al-ghumr* iv, 187.

By way of comparison, note that al-Sakhāwī attended a Qur'ānic school (*maktab*) at the age of four and his master, Ibn Ḥajar, at five. See Guérin du Grandlaunay, *Iršād al-ġāwī* i, respectively 198 and 79. Al-Sakhāwī's first teacher was a copyist (*nāsikh*). Ibid. 199.

<sup>51</sup> Hirschler, The written word 91-9. As stated by Sirat, Writing 88: "To give an adequate

(bulūgh)—generally between the age of eight and twelve—, a student was expected to have memorized the whole text; this accomplishment was usually celebrated by a public recitation, which also tallied with the end of the primary education. Al-Maqrīzī was unique, as he was only seven when he memorized the whole Qur'ān, a fact that corroborates that he received a good primary education. As noted, his father worked as a secretary at the state chancery, which means that he must have practiced calligraphy, which was a prerequisite for a secretary. Once his secondary education was complete, around the age of twenty, we know that al-Maqrīzī followed in his father's steps by entering the state chancery and that he was quickly assigned to oversee the department of secretaries (mubāsharat al-tawqī'). Thus, al-Maqrīzī must have received

account of Muslim schools is an impossible task, for two reasons: First, the Muslim cultural sphere penetrated vast stretches of Asia, Africa, and Europe. Each country had its own traditions of schooling and they cannot be treated as a whole. Second, we know almost nothing about how most of these schools taught Arabic writing." On the teaching of writing and calligraphy in the Mamlūk period, see now Behrens-Abouseif, *The book* 108–13. Moreover, we have a precise description of the teaching of writing for the beginning of the eighth/fourteenth century in Egypt. In his *Nihāyat al-arab*, al-Nuwayrī (d. 733/1333), who was known for his excellent handwriting, explains that writing was taught in two steps: primary training provided the pupil with the fundamentals of writing, followed by secondary training, where calligraphy was taught (see *Nihāyat al-arab* ix, 218–23). On this text, see also chapter 6 in this volume as well as Gacek, Al-Nuwayrī's classification, for a translation of the last part of the section referred to above.

- In the case of Ibn Ḥajar, the public recitation took place when he was twelve, while for al-Sakhāwī it was before he turned thirteen. Guérin du Grandlaunay, *Iršād al-ġāwī* i, 189 and 204 respectively. This event was sometimes celebrated with even greater solemnity by allowing the pupil to recite the entire Qurʾān throughout the full month of Ramadan. See ibid. 189–91.
- 53 Ibn Fahd, Mu'jam al-shuyūkh 64.
- This is all Ibn Ḥajar says when he states that al-Maqrīzī "nasha'a nash'a ḥasana." See Ibn Ḥajar, Inbā' al-ghumr iv, 187.
- Wiet, Les Classiques, 45. Prerequisite refers to the ability to write in one of the styles used by the chancery. Some obviously had more skill than others and therefore they were asked to pen the most significant documents. See below, n. 57.
- Al-Maqrīzī personally affirms his activity at the chancery when he says that he wrote (*katabtu*) there. See al-Maqrīzī, *Durar al-'uqūd al-farīda* ii, 49.
- During the Mamlūk period, the state chancery employed two categories of secretaries. The first category included the <code>kuttāb al-dast</code> or <code>al-muwaqqi'ūn</code>. These secretaries attended the sessions held in the sultan's presence, in which petitions were presented, and notes were written down (<code>tawqī'</code>) to record the decision taken during these sessions. According to al-Qalqashandī, this category of secretaries increased in number in the eighth/fourteenth century, rising from three to about ten by the third quarter of the same century, and continued increasing progressively until there were twenty by the end of the century, when al-Maqrīzī headed the department. Initially, the second category, the <code>kuttāb al-darj</code>, were

some training in calligraphy, though this is not clear from the list of his masters,<sup>58</sup> with one notable exception.

We would know nothing of his training in calligraphy if he had not mentioned, *en passant*, that one of the most important calligraphers of his time was his master: 'Alī b. Muḥammad al-Sinjārī, known as 'Uṣfūr (d. 808/1406). 'Uṣfūr, who was of Syrian origin, settled in Cairo later in life to become a secretary at the chancery.<sup>59</sup> Ibn Ḥajar depicts him as a calligrapher who wrote the pro-

responsible for issuing all categories of documents. This group also increased in number until they exceeded one hundred thirty at the end of the eighth/fourteenth century. Yet, the tasks they performed decreased at that time, as they only issued documents of the lower categories, while the *muwaqqi'ūn* took over the preparation of the most significant documents. Al-Qalqashandī underlines that some kuttāb al-darj were asked to issue some more important documents, provided they had nice handwriting; this means that most of the kuttāb al-darj at that time had not mastered the various styles used for the issuance of the documents of the highest categories. This also implies that all of the muwaqqi'un had. Considering that al-Maqrīzī was the supervisor of this category of secretaries, it corroborates the claim that he had also studied how to pen documents. See al-Qalqashandī, Subh al-a'shā i, 137-8. Behrens-Abouseif (The book 114) emphasizes that "... the bureaucracy, notably the chancery, was the main domain for recruiting calligraphers. Prominent calligraphers were sought after by the chancery and other administrative offices." For a lavish example of the kind of manuscripts a secretary (kātib al-darj in this case) could produce, see MS Garrett no. 12G (PUL): the text, Idrāk al-sūl fī musābagat al-khuyūl, was composed and copied by al-Husayn b. Muhammad al-Husaynī in 729/1329 for the library of the reigning sultan, al-Nāṣir Muḥammad.

Al-Jalīlī argues that for most of his life and until his death al-Maqrīzī worked at the chancery (*Durar al-'uqūd al-farīda* iv, 43–52 (52: "fa-yabdū anna l-Maqrīzī baqiya fī dīwān al-inshā' ḥattā qabl wafātihi fi 845h")). Al-Jalīlī's assumption is based on his interpretation of passages in which al-Maqrīzī specifies that he had a close relationship with each of the secretaries of state from the reigns of Barquq and his successors, and he means precisely that. Al-Maqrīzī did not state that he worked for them. The only clear indication that al-Maqrīzī worked at the chancery, like his father, is given by al-Maqrīzī himself, who states that he was employed at the dīwān al-inshā' until the 790s/early 1390s: "I sat in it [the hall of the vizier which is in the vicinity of the chancery], by the judge Badr al-Dīn Muḥammad b. Faḍl Allāh al-'Umarī [who was the secretary of state, for the second time, from 786/1385 to 792/1390], when I was supervising the sultanic bureau that oversaw the issuance of official documents (tawqī') until about the 790s [/1390]" ("wa-anā jalastu bi-hā [qāʻat al-ṣāḥib bi-jiwār dīwān al-inshāʾ] ʻind al-qāḍī Badr al-Dīn Muḥammad b. Faḍl Allāh al-'Umarī ayyām mubāsharatī l-tawqī' al-sulţānī ilā naḥw al-tis'īn wa-l-sab'imi'a"). See al-Magrīzī, al-Mawā'iz wa-l-i'tibār iii, 730 (Būlāq ed., ii, 225); Bauden, The recovery 74–5. Ṣāḥib initially referred to the vizier, a position that fell into disuse in the eighth/fourteenth century. The term was then used to designate the secretary of state as well as the hall where the secretaries worked and the archives were kept ( $q\bar{a}$ 'at al- $s\bar{a}hib$ ).

58

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His full name was 'Alā' al-Dīn 'Alī b. Muḥammad b. 'Abd al-Naṣīr al-Sinjārī l-Dimashqī. In the biography of another master calligrapher, al-Ziftāwī (on whom see below), al-Maqrīzī (*Durar al-'uqūd al-farīda* iii, 119) reveals that he was his master: "I met him [al-Ziftāwī] at

portionate styles (al-mansūb) according to Yāqūt al-Musta'simī (d. 696/1298), though he followed the Syrian school in this respect. Ibn Hajar also mentions that a large number of notables  $(a \hat{y} \bar{a} n)$  learned calligraphy from him. 60 In addition to 'Usfūr, al-Magrīzī also may have studied under Muhammad b. Ahmad b. 'Alī l-Ziftāwī (d. 806/1403), to whom he devoted an entry in the biographical dictionary of his contemporaries. 61 There al-Maqrīzī underlines that al-Ziftāwī followed the school of Ibn al-'Afif (d. 736/1336)62 and that al-Ziftāwī authored a short treatise on calligraphy. <sup>63</sup> Al-Magrīzī also stressed that he and al-Ziftāwī attended the classes (majlis) of 'Usfūr in Cairo<sup>64</sup> and that al-Ziftāwī dedicated himself to teaching calligraphy to many Egyptians.<sup>65</sup> Al-Maqrīzī also reckons that al-Ziftāwī was an authority for his knowledge of the proportionate styles, such that he was able to identify the calligrapher of any piece of writing presented to him.<sup>66</sup> He also reports that al-Ziftāwī boasted that he could write a proportionate script with the iron cubit (*al-dhirā* '*al-hadīd*) used by merchants to measure fabrics the same way he used a reed pen.<sup>67</sup> If it is established that al-Maqrīzī studied the art of writing with 'Uṣfūr, it remains to be demonstrated that al-Ziftāwī also taught him his art. In any case, it is clear that al-Maqrīzī was acquainted with two of the most prominent calligraphers of his time.

The question of his age when this training took place is central to the development and evolution of one's writing. Unfortunately, al-Maqrīzī remains

the classes of our master, the most unique of his time, 'Alā' al-Dīn 'Alī b. 'Uṣfūr" (ijtama'tu bihi fī majlis shaykhinā awḥad al-zamān 'Alā' al-Dīn b. 'Uṣfūr). Even though he calls him "our master," al-Maqrīzī did not deem it necessary to devote an entry to 'Uṣfūr in his <code>Durar al-'uqūd al-farīda</code>. On him see also Ibn Ḥajar, <code>Inbā' al-ghumr</code> ii, 341 (no. 21); al-Sakhāwī, <code>al-Daw' al-lāmi'</code> v, 316–7 (no. 1045); Behrens-Abouseif, <code>The book 132–3</code> (what she states on p. 132 regarding his teaching ("He seems to have been associated with the aristocracy, which might have prevented him from teaching") is contradicted by the above-mentioned quotation where his <code>majlis</code> is evoked).

<sup>60</sup> Ibn Ḥajar, Inbā' al-ghumr ii, 341.

<sup>61</sup> Al-Maqrīzī, *Durar al-ʿuqūd al-farīda* iii, 119 (no. 1004). On him see also Ibn Ḥajar, *al-Majmaʿ al-muʾassis* iii, 255–6, no. 630; al-Sakhāwī, *al-Dawʾ al-lāmiʿ* vii, 24.

<sup>62</sup> On him, see Behrens-Abouseif, *The book* 135.

<sup>63</sup> Al-Ziftāwī, Minhāj al-iṣāba. Al-Maqrīzī knew the treatise because he quotes its full title.

<sup>64</sup> According to Ibn Ḥajar, *Inbā' al-ghumr* ii, 341, he was 'Uṣfūr's friend.

<sup>65</sup> In al-Sulūk iv, 23, al-Maqrīzī refers to him as the dean of calligraphers (shaykh al-kuttāb).

<sup>66</sup> Al-Maqrīzī, *Durar al-'uqūd al-farīda* iii, 119; repeated by Ibn Ḥajar, *al-Majma' al-mu'assis* iii, 256, no. 630.

<sup>67</sup> Al-Maqrīzī, *Durar al-'uqūd al-farīda* iii, 119. See also Behrens-Abouseif, *The book* 136. In Cairo at that time the length of the iron cubit (also known as the *dhirā' al-bazz* or *al-qumāsh*) was 58.187 cm. See Hinz, *Islamische Masse* 56 and 58. Al-Ziftāwī probably used a long instrument (with which to trace the characters on paper) for the monumental stone inscriptions then carved on buildings.

silent on the circumstances that led him to attend 'Usfūr's classes. From al-Magrīzī's statement that it was there that he struck up an acquaintance with al-Ziftāwī, who was already a master calligrapher, we might deduce that this took place during his teenage years (al-Ziftāwī was fifteen years older than al-Magrīzī).<sup>68</sup> To get a more precise answer, we must turn to al-Magrīzī's contemporaries. In fact, we know that al-Magrīzī's colleague and friend Ibn Hajar was first trained in calligraphy after he completed his primary education, around thirteen, 69 and afterward proceeded to study with another master, who allowed him to write in the style of calligraphers. 70 Al-Sakhāwī, who belonged to the following generation, started to study calligraphy (*al-kitāba*) at about the same time.<sup>71</sup> These two cases might help us to speculate when al-Maqrīzī began to attend 'Usfūr's classes, i.e., around the age of thirteen to fifteen, when al-Ziftāwī, an accomplished calligrapher whom he met during the same classes,<sup>72</sup> was already in his late twenties.

Be that as it may, al-Magrīzī abandoned his career at the chancery in his mid-twenties and calligraphy was not required in the other positions he filled until his late forties. Unlike other scholars who spent their whole working lives employed at the chancery (e.g., al-Ṣafadī, d. 764/1363), or those who earned a living by copying their own texts or those of others (like al-Nuwayrī),73

<sup>68</sup> He was born in 750/1349–50. See al-Magrīzī, Durar al-'uqūd al-farīda iii, 119.

<sup>69</sup> See al-Sakhāwī, al-Jawāhir wa-l-durar i, 167. His first master was Nūr al-Dīn 'Alī b. 'Abd al-Raḥmān al-Badamāṣī (d. 802/1399-1400). On him see Ibn Ḥajar, al-Majma' al-mu'assis i, 185, no. 555; al-Maqrīzī, Durar al-'uqūd al-farīda ii, 553 (no. 871); al-Sakhāwī, al-Daw' allāmi' v, 438. According to Ibn Ḥajar, ibid., he was a skilled calligrapher (māhir fī ṣinā'at al-khatt) who taught the proportionate styles (al-mansūb), had nice handwriting (kataba l-khatt al-malīh), and was also proficient in the art of the bookbinding ('arafa sinā'at alwirāga).

See al-Sakhāwī, al-Jawāhir wa-l-durar i, 167 (adhina lahu fī an yaktub 'alā ṭarīqat al-kuttāb). 70 In this context *kuttāb* does not mean secretaries, but calligraphers, as in the expression shaykh al-kuttāb seen above (see n. 65). The second master was al-Ziftāwī, under whom al-Maqrīzī also may have learned calligraphy. Contrary to Behrens-Abouseif's assertion (The book 111), Ibn Hajar did not study under Ibn al-Sā'igh (d. 845/1442), the author of a treatise on calligraphy (see Ibn al-Ṣā'igh, *Tuḥfat ūlī l-albāb*). She quotes the same reference as above, where al-Sakhāwī simply indicates that al-Ziftāwī was Ibn al-Sā'igh's master and that he, al-Sakhāwī, studied under the latter for a short period.

Guérin du Grandlaunay, *Iršād al-ģāwī* i, 20, 120; ii, 439, 506 (n. 8), and 525 (n. 5). In general, 71 scholars rarely detail the dates they studied under a specific master, a fact that complicates the historian's quest to know precisely when they were tutored in a given discipline.

Al-Ziftāwī may have followed the teachings of 'Uṣfūr because the latter had been trained 72 according to the Syrian school. Perhaps al-Ziftāwī wanted to enhance his calligraphic prowess and further develop his own style.

See chapter 6 in this volume, pp. 232-259. 73

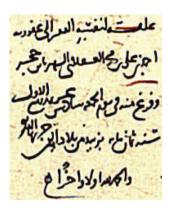


FIGURE 5.5 Abū Dāwūd, al-Sunan (MS Fazıl Ahmed Paşa 294, fol.  $327^a$ ), Ibn Ḥajar's colophon ISTANBUL, KÖPRÜLÜ YAZMA ESER KÜTÜPHANESI



FIGURE 5.6 Abū Dāwūd, *al-Sunan* (Ms Fazil Ahmed Paşa 294, fol. 1<sup>b</sup>), beginning of the text in Ibn Ḥajar's restrained handwriting
ISTANBUL, KÖPRÜLÜ YAZMA ESER KÜTÜPHANESI

al-Maqrīzī no longer needed to practice calligraphy. Thus, his handwriting evolved independently from his training and his personal style developed. We can observe the same process in al-Maqrīzī's colleague and friend, Ibn Ḥajar. Though his master in calligraphy had licensed him to write as a calligrapher, Ibn Ḥajar's handwriting changed when he embarked on a career as a scholar and calligraphy was no longer a necessity. One of the texts (specifically, of ḥadūths) that he copied in the framework of his superior education, at the age of twenty-five, demonstrates that while his handwriting was restrained, it could not be identified with any of the proportionate styles used in calligraphy (see figs. 5.5–5.6. Rather, his hand already featured characteristics that make it recognizable and that later blossomed into his own unrestrained writing (see fig. 5.7).

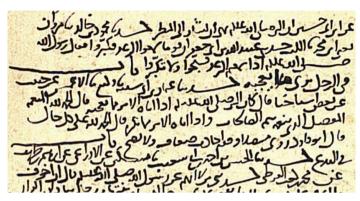


FIGURE 5.7 Abū Dāwūd, *al-Marāsīl* (MS Fazıl Ahmed Paşa 294, fol. 356<sup>a</sup>),
Ibn Ḥajar's unrestrained handwriting
ISTANBUL, KÖPRÜLÜ YAZMA ESER KÜTÜPHANESI

#### 5 Al-Maqrīzī's Handwriting: Analysis

#### 5.1 Some Considerations

Despite the exceptional character of the corpus, most of which has been known for decades, al-Maqrīzī's handwriting has never been thoroughly described and analyzed.<sup>74</sup> Thus far, the only attempt to characterize it was made by Jan Just Witkam, who stated that

[al-Maqrīzī's handwriting] is quite idiosyncratic. The letters are tilted a little backwards, there is a fairly large number of ligatures, punctuation is rather limited but we can say that the text is, generally speaking, very readable. The handwriting has a very personal aspect. No doubt it is possible to maintain that we can always recognize this handwriting as soon as we have seen it.  $^{76}$ 

Contrary to what the title indicates, Fu'ād Sayyid's Khuṭūṭ al-Maqrīzī is just a presentation of al-Maqrīzī's holograph and authorial manuscripts known to him. A revised and expanded version of the same article appeared in Fu'ād Sayyid's *al-Maqrīzī* 95–123.

<sup>75</sup> By punctuation, Witkam is referring to diacritical dots.

Witkam, Les Autographes 92 ("Elle est bien caractéristique. Les lettres s'inclinent un peu en arrière, il y a un assez grand nombre de ligatures, la ponctuation est assez parcimonieuse, mais on peut dire que le texte est, généralement, bien lisible. L'écriture a un air très personnel. Sans doute il est possible de soutenir que l'on peut toujours reconnaître cette écriture dès qu'on l'a vue"). Fu'ād Sayyid's description, in his Khuṭūṭ al-Maqrīzī 140, seems to be an exact copy of Witkam's words: "Either in his drafts or in his fair copies, al-Maqrīzī's handwriting is clear and obvious with distinctive traits: the letters are slightly inclined towards the right; he quite often binds together the [unconnected] letters; he seldom uses the diacritical dots. Generally speaking, it is a handwriting that can easily

This depiction pinpoints some of the main features of the handwriting that are apparent to any scholar with some experience with manuscripts in Arabic script: he reports a general impression of letters leaning to the right, letters connected to the following ones despite the fact that they should remain unjoined, diacritical dots that are not fully indicated, and a degree of legibility. Nevertheless, this description, and the fact that "we can always recognize this handwriting as soon as we have seen it," are far from precise enough to characterize al-Maqrīzī's handwriting beyond doubt. And clearly, several of these features can be noted in the handwriting of other scholars who preceded and followed al-Maqrīzī. In addition, Witkam reduces al-Maqrīzī's writing to basic elements that he observed in a small selection of the corpus, and he does not take into account other factors, like the chronology (did his writing evolve over time, and if so, how?) and the circumstances in which he wrote (typically leading to a fully—or slightly—restrained or unrestrained writing).

In order to characterize al-Maqrīzī's handwriting and help identify it beyond reasonable doubt, we must consider a wide gamut of factors and elements. First and foremost, writing is the result of a tension between two types of habits: those of a prescribed writing system—typically the system one learns at school—and those developed by the writer, which become and reflect his own idiosyncrasies.<sup>77</sup> Such habits must be identified in order to discern between the lucid (learned) and elusive (elements of execution) differences. 78 Several factors may also affect the appearance of a handwriting: the age of the writer, and the process of aging, the circumstances in which the text is produced, the nature of the text being written (personal notes, a copy of someone else's text, a fair copy of a personal text, etc). Depending on the combination of several of these factors, the writer might adopt a more restrained writing characterized by more lucid elements or a less restrained, more automatic, writing that features more elusive components. In this respect, we must analyze the handwriting across a full range of variations, as implied by the above-mentioned factors, and we must consider a broad spectrum of neutral observations. These observations must include the codicological features of the manuscripts produced

be recognized once you have seen it" ("wa-khaṭṭ al-Maqrīzī, sawā' fī musawwadātihi aw mubayyaḍātihi, wāḍiḥ wa-jalī, mutamayyiz al-khaṣā'iṣ, tamīl fīhi l-ḥurūf qalīlan ilā l-khalf wa-yarbuṭu aḥyānan kathīra bayna ḥurūfihi, wa-ʻalāmāt al-tarqīm 'indahu qalīla. Wa-fī l-ʻumūm, fa-huwa khaṭṭ yumkin al-taʻarruf 'alayhi bi-suhūla, bi-mujarrad an narāhu").

<sup>77</sup> Huber and Headrick call the first type "class characteristics" and the second "individual characteristics." Huber and Headrick, *Handwriting identification* 33.

<sup>78</sup> Sirat, Writing 495.

by the author (support; layout: justification, alignment, spacing), the orthographical habits and mistakes, and the shapes of individual letters, knowing that the way they are connected within words may take specific and fixed forms. Phenomena, like abusive ligatures and the contraction of the ending of given letters, must not be overlooked to study the issue of control vs. the speed of execution, two factors that should be considered together with the circumstances linked to the writing. Finally, physical and/or mental impairment can reveal the problems a writer encounters with the passing of time. Taken together, all these elements offer a global vision recommended by handwriting experts, 79 one that will be applied, whenever it is useful, to characterize al-Maqrīzī's handwriting.

#### 5.2 Selection of the Corpus

To tackle the various issues that I have outlined briefly, it is necessary to rely on a significant and multifarious corpus. As highlighted in the third section above, al-Maqrīzī's legacy in terms of holograph and authorial manuscripts is helpful in this respect: it reflects fifty years of activity, 80 it offers a plethora of material (more than ten thousand pages), and it covers a wide array of categories of texts copied in diverse circumstances. Thus, after six centuries, we can finally scrutinize al-Maqrīzī's handwriting in all its complexities. Paradoxically, the size of the corpus in itself poses a problem: the whole corpus can hardly be grasped in the framework of an analysis that attempts to address all the criteria detailed above. For this reason, I focus my attention on a selection of manuscripts that are dated or datable with some precision and that cover a variety of circumstances. This led me to put aside the manuscripts of al-Muqaffā (MSS L1-4, P), a biographical dictionary that al-Maqrīzī composed over a long period, though most of it is already a fair copy. Unlike some of his other texts, it has been impossible to accurately date the fair copy because al-Maqrīzī could add a quire at any time, given the nature of the text, which is alphabetically organized. 81 G2, which contains another biographical dictionary, Durar al-'uqūd al-farīda, was

<sup>79</sup> Sirat, Writing 499–6 largely based herself on the method developed by M.-J. Sedeyn, Introduction. This method is also described in detail in chapter 4 in this volume, see pp. 78–135. For the sake of exhaustiveness, I must also mention Huber and Headrick, Handwriting identification.

<sup>80</sup> Unfortunately, there remains a big gap between the first witness of his activity as a scholar (IM, dated 795/1392–3 at twenty-eight years old) and the following references available to me (IT1 and IT2, datable between 811/1408–9 and 817/1414, when he was between forty-four and fifty years old). See fig. 5.3.

<sup>81</sup> For the dating of some parts, see Bauden, Maqriziana x-1.

set aside for the same reason.<sup>82</sup> Two additional manuscripts were also left out: the Damascene notebook (Da);<sup>83</sup> and C, a dated volume of résumés preserved in Calcutta.<sup>84</sup> In addition, I could not physically examine them, which means that no codicological description is available, particularly regarding the paper.

Apart from these exceptions, I have taken into consideration most of al-Maqrīzī's holographs and authorial manuscripts. These include résumés made while reading (Du, IM and Lg), the first sketches of sections to be included in his already composed works (Al and Lg\*85), fair copies of previous versions (An, IA, IT1, IT2, IS, IY, G1, G2), and finally, a copy of someone else's work that al-Maqrīzī undertook toward the end of his life (L5). 86

Unless otherwise stated, for the analysis of the writing that follows, I selected two contiguous pages located at some distance from the beginning of the manuscript.<sup>87</sup> I did this in order to avoid pages where al-Maqrīzī might have paid more acute attention to his writing: in other words, where he would have exercised more control (typically for the first leaves). For tables 5.14 through 5.17, I chose most of the letters and combinations of letters from these two pages, unless I could not find an occurrence there, in which case, I extended my search on the preceding and following pages until I found such an occurrence.<sup>88</sup> Whenever al-Maqrīzī uses allographs, i.e., two shapes for the same letter, I reproduced both in the tables. In addition to this sampling, I also perused the remainder of each text in search of idiosyncratic shapes of combinations of letters or full words. For tables 5.3–5.4, and 5.7 to 5.9, where specific shapes of individual and combined letters are provided according to the number of

<sup>82</sup> The only element we know with certainty is that most of it was completed before 839/1435, though al-Maqrīzī added material until shortly before his death.

No color reproduction was available to me and the quality of the black and white copy that I have is not good enough for an analysis of this scope. Its physical state is not good either: it was severely damaged by bookworms and several leaves are in pieces.

<sup>84</sup> I do not have a high quality color reproduction of this manuscript.

<sup>85</sup> To distinguish this section in Lg from the above-mentioned résumé found in the same manuscript, I have appended an asterisk to it.

Al-Maqrīzī copied the short text (fols.  $1^a-14^b$ ) in Mecca in 841/1435. Though L5 is included in the timeline (fig. 5.3), this section does not appear there because, according to the definition adopted in this volume, it is neither a holograph nor an authorial manuscript. It is someone else's text in al-Maqrīzī's hand (see the introduction to this volume, particularly pp. 4–6).

The pages selected are as follows: Al, fols.  $4^b-5^a$ ; An, pp. 8-9; Du, fols.  $37^b-38^a$ ; G1, fols.  $10^b-11^a$ ; IA, fols.  $74^b-75^a$ ; IM, fols.  $8^b-9^a$ ; IS, fols.  $12^b-13^a$ ; IT2, fols.  $16^b-17^a$ ; IY, fols.  $28^{a-b}$ ; MS L5, fols.  $10^{a-b}$ ; Lg, fols.  $131^{a-b}$ , Lg\*; fols.  $188^{a-b}$ . The reader will find a reproduction of the first of the two pages at the end of this chapter (see figs. 5.26-5.37).

<sup>88</sup> In the cases of the first sketches (Al and Lg\*), sometimes I was unable to find an occurrence, given the limited number of folios concerned (for instance, the section chosen in Al covers only two pages).

occurrences (for statistical reasons), I counted them on a single page (the first of the two selected), with the exception of manuscripts in a smaller format (Du, IT2). In these cases, I used two pages in order to assess roughly the same quantity of text as for the manuscripts in a larger format.

## 5.3 The Pace and Thumbnail Index Method

In a 2001 article, Nikolaj Serikoff proposed to establish a thumbnail index based on pace for the identification of—particularly informal—hands.<sup>89</sup> Serikoff detailed the criteria as consisting of:90 (1) a description of the script according to its resemblance to one of the calligraphic styles (e.g., naskh-like); (2) the number of lines to the page; (3) the density ( $\Delta$ ) of the text, calculated by multiplying the number of word segments<sup>91</sup> by the number of lines to the page; 92 (4) the ratio between the height of the alif and the width of the unconnected  $b\bar{a}$ ;93 and (5) the angles of inclination of the connected alif (a) and the stroke of the connected  $k\bar{a}f$  (k).<sup>94</sup> The whole calculation constitutes the pace of the manuscript; for instance: *naskh*-like; 17;  $\Delta$  17×31 (530); 1:0.9; a 100°, k 30°. According to Serikoff, each manuscript can be characterized according to its pace and using tables, where such paces are organized on the basis of density, ratio, or angle of the *alif* allows us to quickly find possible matches for another hand. Such a system is presented as an effective tool to compare handwritings and manuscripts with similar features. Comparison is obviously key to the process: identical or evenly matched formulas do not imply that two manuscripts were penned by the same person.95

<sup>89</sup> See Serikoff, Image and letter.

<sup>90</sup> Ibid. 57-8.

<sup>91</sup> I.e., composed of connected letters (thus the word الأطباق contains three segments), without considering the wāw when used as a coordinator or the words written above the line.

<sup>92</sup> Serikoff, Image and letter 57, recommends reducing the result to the nearest ten, but in his *Arabic medical manuscripts* 6–7, he seems to have adopted the nearest five.

<sup>93</sup> Or tā' and thā'.

See also fig. 1 in Serikoff, Image and letter 57. Serikoff, Arabic medical manuscripts 544, recommends measuring several alifs and kāf s and giving the average value. He does not say so but he reduces the average of all the measures taken to the nearest five, as the figures in the tables show. We must also emphasize that the angle of the kāf can differ greatly according to its shape (either mabsūṭa or mashkūla). Serikoff does not seem to have taken this into consideration (in Image and letter, his description corresponds to the kāf mashkūla). For the sake of precision, I only measured the angle of the kāf mashkūla.

<sup>95</sup> Serikoff put his method into practice in his catalog of medical manuscripts held at the Wellcome Institute in London: Serikoff, *Arabic medical manuscripts* 6–7, 544–50. As he stresses (ibid. 544): "As average values are used throughout the tables, one and the same pace can describe several different handwriting styles. It is therefore suggested that neigh-

MS	Age	No. of lines	Density coeff.	Ratio <i>alif:bā</i> '	alif	kāf
IM	28	21	525	1:1.5	085	030
IT2	bet. 44-50	20	400	1:1.3	075	035
$G_1$	bet. 49–57	27	620	1:1.25	075	030
IY	aft. 50	27	650	1:1.45	075	035
Du	bet. 51–7	14	400	1:1.25	065	030
Lg	56	21	440	1:1.25	075	030
Lg*	63	17	340	1:1.15	070	035
Al	aft. 63	24	530	1:1.65	070	030
An	aft. 63	27	620	1:1.3	070	030
IS	bet. 64-7	25	550	1:1.4	065	030
L5	71	25	450	1:1.4	065	030
IA	76-7	25	475	1:1.35	070	035

TABLE 5.1 Paces of al-Maqrīzī's manuscripts

Before accepting or rejecting this method, I first checked to see if it provides significant results when applied to the corpus of al-Maqrīzī manuscripts I had selected. Table 5.1 presents the pace calculated for each of the manuscripts that are part of this corpus, with the data arranged according to the date of production as evidenced in the timeline (see fig. 5.3).  $^{96}$ 

We immediately note the large discrepancies in density and ratio between the manuscripts. Density is calculated based on the number of word segments on one line. This number can vary greatly from one line to the next and according to the nature of the text. Therefore, the factor of density, when calculated this way, is not pertinent. Indeed, while choosing a line at random and multiplying the number of word segments by the number of lines produces a result, this result is hardly representative of a manuscript. But, if we calculate the average of the word segments found on several lines, we would have a better picture of this factor, and it would be a meaningful element in the identification of handwriting. The same assessment can be made with regard to the ratio of the average height of the *alif* to the isolated  $b\bar{a}$ ': this ratio fluctuates between 1.15 and 1.65, with a majority (eight manuscripts) between 1.25 and 1.4. As for the angle of inclination of the connected *alif* and  $k\bar{a}f$ , the results are more stable,

bouring paces are examined and the handwriting styles they describe be compared to that in the manuscript being studied."

<sup>96</sup> The calculations were made on the first of the two pages selected, as explained above.

oscillating between  $65^{\circ}$  and  $85^{\circ}$  for the first, with a majority between  $65^{\circ}$  and  $75^{\circ}$ , and between  $30^{\circ}$  and  $35^{\circ}$  for the second, with a majority at  $30^{\circ}$ . In this case, the average is obtained by measuring five occurrences of each letter. Yet, the variation between each of these occurrences is at times large: for instance in IA, it gives  $67^{\circ}$ ,  $68^{\circ}$ ,  $69^{\circ}$ ,  $74^{\circ}$ ,  $84^{\circ}$  for the *alif*. Obviously, this sometimes large variation is completely lost in the average result calculated. As for the *kāf*, the variation is somewhat more limited:  $28^{\circ}$ ,  $33^{\circ}$ ,  $35^{\circ}$ ,  $36^{\circ}$ ,  $38^{\circ}$ .

But the best way to test the method is to apply it to another manuscript penned by al-Maqrīzī and see whether or not it identifies a match in table 5.1. For this I chose IF1, a manuscript belonging to a five-volume set of the same text copied the same year and in the same context as IA. I calculated its pace as 25, 425, 1:1.45, 65°, 30°. With the exception of the angle of the *alif* and the  $k\bar{a}f$  and the number of lines to the page, the pace scarcely compares with the one calculated for IA—or with any of the other manuscripts considered: the density, the ratio, and the angle of the *alif* all differ slightly. On the basis of this pace, the manuscript would not be identified as possibly by the same author of IA despite the links that tie it to IF1 (text, period of copy, paper). In conclusion, at least in al-Maqrīzī's case, the pace method and the thumbnail index that relies on it cannot be regarded as a trustworthy and accurate way to identify a handwriting. The one element that may be a sufficiently accurate method of analysis is that of the angle of the  $k\bar{a}f$  mash $k\bar{u}la$ , and to a lesser extent, of the *alif*.

# 5.4 A Global Analysis

5.4.1 Codicological Features

#### 5.4.1.1 *Support*

Table 5.2 lists the formats of each of al-Maqrīzī's manuscripts (size of one leaf, size of the frame within which the text is justified, number of lines to the page, number of leaves, and number of leaves composed of reused documents). The table, divided into three sections on the basis of the number of lines to the page in each manuscript, helps us understand what kind of format al-Maqrīzī used for certain categories of texts. The first section shows that the size of one leaf varies between 140 and 180 in height and 120 to 162 in width, with a number of lines spanning between fourteen and twenty-one lines with an average of twenty to twenty-one. In the second and third sections, the table displays sizes that range between 233 and 255 in height and 152 to 169 in width, with a clear difference for the number of lines between sections 2 and 3 (25 for the first and 27 for the second). The first section is notable for the categories of texts it includes: the three notebooks, two independent résumés, and one draft of one of his texts. As the table shows, the manuscripts belonging to these categories

TABLE 5.2 List of the sizes of al-Maqrīzī's manuscripts<sup>a</sup>

	MS	Title	Size	Justification	No. of lines	No. of fols.	Reused docs. (no. of fols.; %)
1	Du	Mukhtaṣar Durrat al-aslāk	140×162	105×125	14	179	107 (60%)
	Da	Notebook	150×120	125×90	17-20	80	2 (2.5%)
	Al	Notebook	155×120	120×95	20 (mostly)	52	0
	IT2	al-Khiṭaṭ (draft)	179×141	135×100	20	182	177 (97%)
	IT1	al-Khiṭaṭ (draft)	$181\!\times\!144$	140×105	20	179	158 (88%)
	Lg	Notebook	$165{\times}136$	140×100	21 (mostly)	209	85 (41%)
	C	Mukhtaṣar al-Marwazī	184×140	145×100	21	131	?
2	IA	al-Khabar	233×152	180×110	25	245	2 (1%)
	IF1	al-Khabar	233×155	180×110	25	254	0
	IF2	al-Khabar	233×155	180×110	25	163	0
	IF3	al-Khabar	238×155	180×110	25	265	15 (6%)
	IF4	al-Khabar	235×155	180×110	25	276	0
	IS	Imtāʻ al-asmāʻ	237×155	180×110	25	211	2 (1%)
	$L_5$	Ibn Ḥabīb, <i>al-Mukhtalif</i>	239×154	180×110	25	$214^{\mathrm{b}}$	0
	IM	Mukhtaşar al-Kāmil	$255 \!\times\! 169$	190×120	25	215	0
3	L4	al-Muqaffā	235×159	190×110	27	550	25 (5%)
Ü	Р	al-Muqaffā	250×160	190×110	27	260	14 (5.5%)
	L2	al-Muqaffā	238×159	195×110	27	287	5 (2%)
	Lı	al-Muqaffā	255×160	195×110	27	226	9 (4%)
	L <sub>3</sub>	al-Muqaffā	239×160	195×110	27	252	12 (5%)
	IY	al-Sulūk	250×166	195×115	27	257	0
	G2	Durar al-'uqūd al-farīda	245×160	195×115	27	185	3 (2%)
	$G_1$	Ittiʻāz al-ḥunafā'	245×160	200×115	27	58	0
	An	al-Khiṭaṭ (fair copy)	$245\!\times\!165$	200×115	27	261	0

a The manuscripts are arranged according to the number of lines to the page, then the size of the justified text.

b The text copied by al-Maqr $\bar{z}\bar{z}$  covers fols.  $1^a-14^b$ , the remainder is mostly in someone else's hand.

have smaller formats in comparison with the remainder of the volumes in sections 2 and 3. Their format varies between 140 and 184 in height and 120 to 162 in width. Of these manuscripts, four are mainly composed of reused chancery paper (Du, IT1, IT2, Lg) with the percentage of reused paper ranging from 41 to 97%.

Al-Magrīzī used discarded chancery paper for an obvious reason: these texts (notebooks, drafts, and résumés) were for personal use and were not meant to survive its author.<sup>98</sup> In this context, the use of a cheaper material was natural. Most chancery documents were issued on scrolls made of sheets of paper pasted one below the other. While the length of the scroll depended on the text to be copied, its width depended on the nature of the document and the rank of the recipient. The sheets used to make the scroll could be kept in their original size for the largest of documents that were for recipients of a higher rank, or cut into smaller sizes for the lower categories. The text was penned in large characters, the size of which depended on the category of the document, with a large interlinear space of several centimeters. Moreover, the writing covered only one side of the scroll.99 These features explain why these kinds of documents could be reused once they were discarded. 100 Once discarded, the scrolls could be cut into smaller pieces to create quires, where usually only one line of text of the original document would appear on one side of each leaf inside the quire. In light of this, the size of these quires clearly depended on the category of the original document. Of course, this also determined the size of the quires of blank paper that al-Maqrīzī could use to complete a volume composed of reused documents, but also for a volume made entirely from blank paper, as in the case of two of the notebooks (Al and Da).<sup>101</sup> Generally speaking, we can say

<sup>97</sup> A copy of C is not yet available to me, thus I have not yet determined whether or not it contains recycled documents.

<sup>98</sup> If such manuscripts have been preserved, this is a result of al-Maqrīzī's personality and fame: such objects became collectibles because they were in al-Maqrīzī's hand, something that could still be recognized several centuries after his death. For instance, Lg was part of the library of al-Zabīdī (d. 1205/1790), who knew that the notebook had been penned by al-Maqrīzī though his name is never mentioned in the notebook. For his ownership mark, see Bauden, Maqrīziana I-1 25-6.

<sup>99</sup> Bauden, Mamluk diplomatics 47–50; Dekkiche, Diplomatics 200–2.

These features were not specific to the Mamlūk chancery: they were also applied, though not necessarily in full, by the chanceries of other eastern dynasties, like the Rasulids of Yemen, the Qara Qoyunlu, the Timurids, etc. For the reused chancery documents in al-Maqrīzī's manuscripts, see Bauden, The recovery; Bauden, Diplomatic entanglements; Bauden, Yemeni-Egyptian diplomatic exchanges.

<sup>101</sup> Da contains only one bi-folio from a reused document.

that al-Maqrīzī saved quires of a smaller format for the category of texts that may be defined as his *Nachlass* (texts not meant to be published).<sup>102</sup>

When al-Maqrīzī prepared a fair copy of one of his texts—and in one case made a copy of someone else's text  $(L_5)$ —, he opted to use blank paper. All the manuscripts listed in sections 2 to 3 share the same characteristics: the support is an Oriental laid paper that is creamy and rather thick with some imperfections (e.g., undissolved pieces of fabric, like pills and fibers, and unevenly distributed paste that produces thinner or thicker areas in the sheet) that are visible to the naked eye; its surface was unevenly sized; the chain lines are grouped in twos and, like the laid lines, they are sometimes askew.  $^{104}$ 

With regard to the number of lines, the difference that we note between manuscripts of sections 2 and 3—25 and 27 lines respectively—should not be attributed to the small increase in the size of leaves between the two sections. Some manuscripts of section 2 share similar measurements with some of section 3 and vice versa (compare IM with L1 and L4 with IF4). 105 We must find the reason in the tool (called *misṭara*) al-Maqrīzī used to imprint a blind ruling of lines on the sheet he used. Interestingly, with the exception of IM, all the manuscripts in section 2 were produced after 832/1428, while those in section 3 that can be dated were made after 816/1413-4 and shortly after 831/1427-8. This chronological shift in the number of lines to the page provides us with a significant piece of data: around his mid-sixties, al-Maqrīzī opted for a smaller number of lines to the page. It is difficult to argue why he would have needed to reduce this number. A decrease of two lines does not amount to a lot and can hardly be related to old age. Whatever the case may be, if we could confirm this pattern of using a 25-line *mistara* after the age of 65, it would help us date the other manuscripts in section 3 (L1, L2, L3, L4, P, G2) to before the 830s/1426-7.

## 5.4.1.2 *Layout*

In this section, I consider the right and left margins, the alignment, and the interword and intraword spacings. To determine the most minor variations, I added a grid to the figures on which this section is based (see figs. 5.26–5.37).

One exception to this rule is IM, a résumé al-Maqrīzī made at the beginning of his career entirely on blank paper. In this case, he used the usual format of paper that gives an inquarto volume.

As noted in table 5.2, reused documents also feature in fair copies, but in smaller quantities (between 1 and 6 percent) and always for later additions.

Humbert, Un papier, describes this kind of paper. She gives the size of the sheet, after trimming, as being between 466–532×320–364.

<sup>105</sup> These differences in size are attributable to trimming which, sometimes, took place more than once during the life of a manuscript.

The observation of the right margin shows that in most cases it moves progressively a few millimeters toward the left, usually around the middle (IM, G1, Lg\*, IY, Du, An, L5, IA). We notice that it is clearly regressive in only three cases (IT2, Lg, IS).  $^{106}$  As for the inner margin, IM is the only manuscript with an almost rectilinear alignment; it is closely followed by G1. In both cases, al-Maqrīzī pays more attention to the justification than he does in most of the other manuscripts that follow them chronologically. In the other cases, the left margin is mostly irregular, and sometimes regressive. In order to keep the ending of lines aligned with the others a system was applied: the final part of the word was written above the last segment (see IM, l. 25: al- $Sh\bar{a}fi\bar{\imath}$ ) or at some space in the inner margin (see IM, l. 22: al- $Sh\bar{a}fi\bar{\imath}$ ), and the last letter was extended (see IM, l. 15:  $m\bar{a}ta$ ). These phenomena are all visible in IM, the manuscript in which the justification to the left is aligned most evenly, in comparison with the other manuscripts.

The study of the alignment of lines with the baseline also reveals interesting features. While in IM and Lg lines tend to descend slightly toward the end,  $^{107}$  in all the other manuscripts, by contrast, the lines tend to slope upward. This is partly, but not fully, explained by the tendency to end the last word or part of it somewhat above the baseline, a practice commonly observed in documents produced in the Mamlūk chancery, and justified by the need to avoid breaking the last word at the end of the line. Moreover, in four cases, some lines look concave with the central part clearly at a lower level in comparison with the beginning and ending of the line: the impression is that the line snakes up and down and then up again. This feature can be observed in Lg\* (ll. 7, 16–7), An (ll. 7–8, 21, 24–5), IS (ll. 10–6, 24), and L5 (ll. 9–10). In all these cases, the handwriting shows a wavy writing line.

The spacing between words and within words is irregular, with the exception of IM. Moreover, unlike IM, all the other manuscripts reflect a system in which the beginning of a word is usually written above the end of the preceding word. This system explains why the spacing between words is narrower, giving the writing a more compact aspect (see fig. 5.8).

# 5.4.2 Orthography

Issues linked to the way an author writes specific words must be addressed. Some traits or habits can help in the identification of an author's handwriting. Unfortunately, such features are rarely scrutinized and analyzed for authors

Al is not considered here because the leaf is clearly not aligned on the picture and this gives a false impression of regressive movement, i.e., toward the right margin.

<sup>107</sup> Here again, Al is set aside for the same reason invoked in the preceding note.

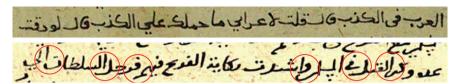


FIGURE 5.8 Spacing between words and the overlapping of words (above: IM [MS 575], fol. 20, l. 9, 47 letters; below: IY [MS Şehit Ali Paşa 1847], fol. 28 a, l. 19, 57 letters)

ABOVE: ISTANBUL, MURAT MOLLA KÜTÜPHANESI; BELOW: ISTANBUL, SÜLEYMANIYE KÜTÜPHANESI

in the Islamic world. The text editors pay scant attention to these characteristics and, in the majority of cases, standardize the orthography without noting details about the readings in the holograph. In a study based on a large part of Lg, I was able to list a series of orthographical, morphological, and syntactical phenomena when I worked on the assumption that Lg is a notebook composed of résumés made on the spot, first sketches, and personal notes. Examining a text in this way might reveal more of such phenomena that appear when an author is not just copying but writing, in the sense of composing or summarizing. In such conditions, my presupposition was that he might pay less attention to the way he writes some words. 108 As I noted then, some of the phenomena I identified result from archaic orthography still found in the Qur'an, like disregarding the *alif* as the mark of the long vowel  $\bar{a}$  within certain categories of personal and common names (like Sulaymān, Uthmān, qiyāma, thalāth written سليمن، عثمن، قيمة، ثلث Others are more idiosyncratic, and reflect what is now defined as Middle Arabic or Mixed Arabic, e.g., the support of the hamza (ruʾūs written روس for instance) or the use of the alif otiosum almost systematically at the end of words ending with a wāw (e.g. banū written بنوا). These phenomena, as interesting as they may be, are not necessarily characteristic of a way of writing and a writer as they can be observed in many other cases in holograph and non-holograph manuscripts.

Here, other cases that are less often observed in the hand of other authors are more pertinent to the issue. For example, al-Maqr $\bar{z}z\bar{z}$  tends to drop the initial *alif* for the word *ithnān* and its various forms (feminine, different cases, in annexation; see fig. 5.9). This phenomenon appears in several of his holographs, indicating that this is his usual practice, one that should not be identified only in his notebooks. Another idiosyncrasy relates to the word *allafa*, which he writes systematically in its past form with two *lāms* (see fig. 5.10). I spotted no fewer than seven occurrences in Lg and one in 1Y; this indicates that it is his

<sup>108</sup> Bauden, Maqriziana VIII.



FIGURE 5.9 The word  $ithn\bar{a}n$  in Lg, fol.  $166^a$ , l. 17 (MS 2232, left:  $thn\bar{a}n$ ) and IF3 (MS Fatih 4340), fol.  $117^a$ , l. 2 (right: thnatay)

LEFT: LIÈGE, LIÈGE UNIVERSITÉ, BIBLIOTHÈQUE D'ARCHITECTURE, LETTRES, PHILOSOPHIE, HISTOIRE ET ARTS; RIGHT: ISTANBUL, SÜLEYMANIYE KÜTÜPHANESI





FIGURE 5.10 The word *allafa* in Lg (MS 2232), fol. 8<sup>b</sup>, l. 20 (left: *allafahā*) and IY (MS Şehit Ali Paşa 1847), fol. 4<sup>a</sup>, marginal addition, last line (*fa-allaftu*)

LEFT: LIÈGE, LIÈGE UNIVERSITÉ, BIBLIOTHÈQUE D'ARCHITECTURE,

LEFT: LIÈGE, LIÈGE UNIVERSITÈ, BIBLIOTHÈQUE D'ARCHITECTURE, LETTRES, PHILOSOPHIE, HISTOIRE ET ARTS; RIGHT: ISTANBUL, SÜLEY-MANIYE KÜTÜPHANESI

very personal way of writing this specific word. <sup>109</sup> Other cases can be found in his other holographs too. Even though this orthographic habit concerns a very specific word that does not appear frequently in his writings, it constitutes one peculiar element that is helpful for those seeking to identify his handwriting.

## 5.4.3 Handwriting

## 5.4.3.1 *Letters*

Handwriting specialists stress that writing is not the result of a regular combination of calibrated independent letters. Children are first taught how to write individual, separate letters, then they learn to combine them with other letters, <sup>110</sup> to join them together with specific ligatures, and eventually, some create their own ligatures. This process implies that short words and combinations of letters reveal more about a handwriting than the study of independent letters because each word is a shape in itself: ligatures and spaces are considered more personal than the shapes of letters themselves. <sup>111</sup> Despite the fact that Arabic script is predominantly composed of connected letters (i.e., with ligatures,

This systematic phenomenon cannot be associated with letter stutter, where the repetition of a letter in handwriting is considered accidental.

<sup>110</sup> In medieval Islam too according to al-Nuwayrī's description (Nihāyat al-arab ix, 218– o).

Berrichon-Sedeyn, Acte mécanique 221, 224 (no written element taken separately can be significant), 227 (similitudes and discrepancies noted in the shapes of letters are not significant in themselves); Sirat, *Writing* 492; and chapter 4 in this volume.

which makes the analysis of letters taken independently less pertinent), <sup>112</sup> I maintain that it is still useful to look at the shape of each letter, connected as well as unconnected, when the handwriting is an informal one. <sup>113</sup> As we will see, these letters present features that are already characteristic of a person's age and the circumstances in which this person is writing. Here the caveat outlined by handwriting specialists is countered by the large chronological span of time during which one person may be writing. When considered in relation to the issue of the connections, which is dealt with in the following sub-sections on ligatures, idiosyncratic forms, and cursivity, they reveal features and trends that demonstrate the validity of this approach. In what follows, I describe the main attributes of each letter—or homograph—and focus on its evolution with the passing of time. My description is based on the occurrences gathered in tables 5.14–5.17 placed at the end of this chapter, where the manuscripts are arranged in chronological order based on the timeline (fig. 5.3).

# 5.4.3.1.1 alif (Table 5.14)

When unconnected, the letter is traced from top to bottom without a head-serif. The shaft generally consists of a dash that tends to be thick at the top and fades away to a thin line at the bottom. Largely vertical in IM (see table 5.1, where the average angle is  $85^{\circ}$ ), it starts to slant slightly to the right with an angle that can vary up to fifteen degrees, the angle increasing a bit toward the end of al-Maqrīzī's life.

In its connected form, the letter is written from bottom to top, with the upper part of the shaft sloping toward the right. In one particular case (the word  $q\bar{a}la$  not preceded by another connecting letter), the top of the alif curves above the  $q\bar{a}f$  as if it took the place of the diacritical dots of that letter (that is always dotless in this case).<sup>114</sup>

## 5.4.3.1.2 $b\bar{a}'-t\bar{a}'-th\bar{a}'$ (Table 5.14)

Isolated, it is similar to the  $mawq\bar{u}fa$  shape of the letter, i.e., with the initial stroke leaning moderately to the left followed by a long stroke on the baseline and the ending faintly above it. <sup>115</sup> In its initial form, the letter consists of a small

<sup>112</sup> Déroche, Analyser 4.

<sup>113</sup> Scholars who want to analyze formal handwritings face more difficulties. See, for instance, the recent study of Ben Azzouna, *Aux origines du classicisme*, especially chap. 3, where the author discusses her study of Yāqūt al-Mustaʻṣimī's style and where discrepancies can be identified in the shape of a single letter, like the *alif*.

On the possible link of this idiosyncratic shape of the word with cursivity, see the following sub-section.

<sup>115</sup> Gacek, Vademecum 318 (no. 5).







FIGURE 5.11

Examples of the use of *matres lectionis* and of diacritical dots to specify the phonological value of a letter: Lg (MS 2232), fol.  $64^a$ , l. 12 (left:  $lahiq\bar{u}$ ); An (MS Isl. 605), p. 8, l. 18 (center: al-'askar); IF3 (MS Fatih 4340), fol. 125 $^a$ , l. 5 (right: ' $ar\bar{b}$ )

LEFT: LIÈGE, LIÈGE UNIVERSITÉ, BIBLIOTHÈQUE D'ARCHITECTURE, LETTRES, PHILOSOPHIE, HISTOIRE ET ARTS; CENTER: ANN ARBOR, UNIVERSITY OF MICHIGAN, SPECIAL COLLECTIONS LIBRARY; RIGHT: ISTANBUL, SÜLEYMANIYE KÜTÜPHANESI

and usually low stroke that is originally vertical, then, from IY, presents a slant toward the right. In its median form, one notices that the blank space left below the denticle disappears starting with G1, giving the letter a flat base.

## 5.4.3.1.3 *jīm-ḥā'-khā'* (Table 5.14)

In its unconnected position, the letter corresponds to the *mursala* shape with its curved descender. The curve is plainly round in IM but tends to become more angular later. The initial part of the letter can have a *tarwīs*, i.e., a small serif, or not. For the median position, al-Maqrīzī uses two allographs: one form with or without *tarwīs*, the latter starting sometimes below the base of the letter (IT2). In its final position, the letter looks quite peculiar in IM, at the beginning of al-Maqrīzī's career as a scholar: the stroke before the descender goes well toward the right, somewhat excessively. He soon abandoned this shape for a more conventional form that presents the same tendency for the angular curve noted in the isolated form, to such an extent that the letter looks almost like an isolated 'ayn. It is noteworthy that al-Maqrīzī adds, from time to time, a small  $h\bar{a}$ ' as a *mater lectionis* to specify when the phonological value of the letter is that of a  $h\bar{a}$ ' (see fig. 5.11, left).

#### 5.4.3.1.4 *dāl-dhāl* (Table 5.14)

This letter is initially (IM) written with a clearly curved shape, with the axis of the curve close to the line or the ligature of the preceding letter. In its isolated form, the axis starts to rise from IT2 until it reaches its apex ( $45^{\circ}$ ) with IA. The upper part of the letter is also sometimes provided with a kind of  $tarw\bar{\imath}s$ . <sup>117</sup> Once connected, the curve of the letter tends to become flatter (IT2, G1, IY, Lg, Al, An, LG\*), until it completely vanishes (Du, IS, L5, IA): the letter is then reduced to a straight oblique stroke.

<sup>116</sup> Ibid. 318 (no. 9).

<sup>117</sup> This feature is studied in the sub-section on cursivity.

## 5.4.3.1.5 $r\bar{a}$ '- $z\bar{a}y$ (Table 5.14)

In its isolated position, the letter is initially written with a slight curve, with the descender parallel to the baseline. Its Like for the  $d\bar{a}l$ - $dh\bar{a}l$ , the curve starts to decrease until it becomes a straight stroke (IA). For the connected form, al-Maqrīzī uses two allographs: in addition to the  $mabs\bar{u}t$  form, he sometimes opts for the contracted shape (mudghama) where the descender adopts an ending like a hook. Its This second allograph seems to fall in disuse at the end of al-Maqrīzī's life.

# 5.4.3.1.6 *sīn-shīn* (Table 5.14)

The denticles of the letter are all clearly distinguished, and rise somewhat above the baseline in all the positions, but are never sharply pointed, rather rounded. However, from 1s onward, the height of these denticles is much smaller and they barely look like dents anymore. Very early on, after 1T2, the blank space below the denticles fades away, and the base of the letter flattens. When the letter ends with its bowl, the curve is almost a half circle (at the beginning of al-Maqrīzī's career). Then the final part of the curve remains well below the baseline and somewhat angular. In many cases, al-Maqrīzī favors the  $mu'allaqa \, s\bar{i}n$  (i.e., a straight line with no denticles) in the median position only. From time to time, he also writes three dots beneath the letter in the same position to specify that the letter represents a  $s\bar{i}n$  and not a  $sh\bar{i}n$  (see fig. 5.11, center).

# 5.4.3.1.7 $s\bar{a}d$ - $d\bar{a}d$ (Table 5.15)

Initially (IM), this letter adopts a curly and rounded shape in all its positions. The upstroke at the junction of the end of the loop is clearly marked. From IT2 onward, the loop is elongated and slightly flattened. The upstroke at the junction tends to fade away with time and the curve of the bowl, as with the preceding letter, remains under the baseline with an angular hook in some cases.

#### 5.4.3.1.8 *ţā-ṣā*' (Table 5.15)

In its isolated position, this letter is penned in one or two strokes, starting with the stem that may or may not reach the baseline before tracing the loop. When connected, it is usually the loop that follows the ligature with the stem added afterward. In some cases, particularly in the final position, the letter is written

<sup>118</sup> The shape is called *mabsūṭa*: Gacek, *Vademecum* 318 (no. 14).

For the link between this shape and cursivity, see sub-section 5.4.3.3.

in one stroke, as it is in isolation, but it nevertheless connects to the ligature from the preceding letter. The stem is vertical in IM but starts to slant to the right from IT2.

# 5.4.3.1.9 *'ayn-ghayn* (Table 5.15)

Unconnected, the letter is characterized by its two curls, the first one almost closed, while the second one, the descender, is round, with its extremity pointing toward the baseline (IM). IPO From IT2, the first curl opens up and becomes in some cases more angular, exactly like the descender which takes the shape already observed for the  $j\bar{\nu}m-h\bar{\alpha}'-kh\bar{\alpha}'$ . In its median position, the head of the letter is either flat or round with or without counter. In very rare cases, al-Maqrīzī places a small 'ayn as mater lectionis' below the letter to specify that its phonological value is that of a 'ayn (see fig. 5.11, right).

# 5.4.3.1.10 $f\bar{a}'$ - $q\bar{a}f$ (Table 5.15)

Both letters can be written with or without counter. The unconnected  $f\bar{a}$  is written on the baseline with a curly ending  $(majm\bar{u}'a)$ . This curly ending disappears from IT2 and is replaced with a flat ending (without a curl at the end), as it is in its final position  $(mawq\bar{u}fa)$ .<sup>121</sup> In its initial position, the letter is written like a small round with a closed counter, while in the median position, it is sometimes harder to distinguish it from the median 'ayn-ghayn, the top of the letter being somewhat flat and large. The  $q\bar{a}f$  retains its curve. Over time, both letters tend to adopt a shape that is oblique to the baseline.

## 5.4.3.1.11 *kāf* (Table 5.16)

Al-Maqrīzī makes use of the two allographs available: the  $k\bar{a}f$  mabsūṭa and  $k\bar{a}f$  mashkūla. The first one, also described as the 's'-shaped  $k\bar{a}f^{122}$  or the 'hairpin'  $k\bar{a}f$ , <sup>123</sup> is written in one stroke, beginning with the upper part of the bar. The angle between the bar and the body can be sharp-cornered or wavy (IM), but over time, it has more of the first type. After IM, the base of the body is separated from the baseline, adopting an oblique angle. The allograph ( $k\bar{a}f$  mashkūla) is usually traced in two steps, starting with the shaft and its ligature or ending and followed by the upper bar written from the left, with an average angle of 30° (with a maximum of 35°). In the final position, the shaft slants to the right (Lg\*, and more particularly at the end of al-Maqrīzī's life: IS, L5, IA). The bar

<sup>120</sup> This is referred to as *makhṭūfa*. See al-Ṭayyibī, *Jāmiʿmaḥāsin* (ed. al-Māniʿ), fol. 5<sup>b</sup>.

<sup>121</sup> Gacek, Vademecum 318 (no. 32).

<sup>122</sup> Gacek, The Arabic manuscript tradition 8.

<sup>123</sup> Déroche, Analyser 6.

remains sometimes unconnected or goes through the shaft, a feature probably linked to a question of rhythm. Al-Maqrīzī writes both allographs over time but not consistently and generally as table 5.9 shows. When it is unconnected, al-Maqrīzī largely favors the  $mabs\bar{u}ta$  form, thus conforming to the calligraphic rule set by al-Qalqashandī.  $^{124}$ 

## 5.4.3.1.12 *lām* (Table 5.16)

Generally speaking, the letter presents a straight vertical shaft with an angled stroke. The descender is parallel to the baseline, particularly when the letter is unconnected, while it becomes curvy when in final position. Over time, the angle of the shaft slants toward the right in all its positions.

# 5.4.3.1.13 *mīm* (Table 5.16)

In IM, the body of the  $m\bar{u}m$  is traced according to calligraphic rules. The letter is traced from the top, going down toward the baseline and then rising toward the top to form a circle with or without counter. After IM, the round shape of the letter vanishes in favor of a small dot, sometimes hardly distinguishable from the ligature. If it is connected on both sides, al-Maqrīzī adopts a ligature that descends and immediately turns to the left, leaving the trace of a small dot (mulawwaza). In its unconnected or final position, beside the shape of the letter with a descender slightly curved toward the right ( $mukht\bar{u}la$ ), al-Maqrīzī favors a stroke that remains on the baseline. Such a shape is not described in calligraphic treatises and is thus idiosyncratic. It seems to have been part of his early training. While it may completely disappear for the unconnected form after IM, there remains a trace of it in the final position: the descender is either parallel to the baseline or curvy. When it is curvy, most of the descender is oblique. While the letter can still present a counter in IM, it vanishes immediately after that.

#### 5.4.3.1.14 $n\bar{u}n$ (Table 5.16)

In its unconnected and joined forms, the bowl is well rounded in IM. Afterward, the depth of the bowl shortens while its ending becomes angular as the bowl is

<sup>&</sup>quot;The *kāf mashkūla* is used when joined in initial and median positions. It can definitely not be unconnected" (*fa-lā takūn illā murakkaba wa-mawdi'uhā l-ibtidāʾāt wa-l-wusaṭ wa-lā tanfarid al-batta*). Al-Qalqashandī, *Şubḥ al-a'shā* iii, 84–5.

<sup>125</sup> Al-Ţayyibī, Jāmi' maḥāsin fol. 7a.

<sup>126</sup> Gacek, Vademecum 319 (no. 41).

<sup>127</sup> In IM, I counted seventeen occurrences of this horizontal  $m\bar{\iota}m$  versus just two for the one with a descender on one leaf.

traced more obliquely. In certain circumstances, in its final position the letter adopts two different shapes: either a long straight and oblique stroke or a wavy one  $^{128}$ 

# 5.4.3.1.15 $h\bar{a}$ ' (Table 5.17)

Unconnected, the letter is traced like a  $m\bar{t}m$ , from the top, with a large counter  $(mu'arr\bar{a}t)$ . In his seventies, al-Maqrīzī started the letter closer to the baseline, on the left, giving the letter a flatter shape. Two allographs are attested for this letter in its initial position: it resembles a cat face  $(wajh\ al-hirr)^{130}$  or it is split and wrapped  $(malf\bar{u}fa)$ . Al-Maqrīzī definitely prefers the first; the second features more in drafts, résumés, and first sketches (IT2, Lg\*, Du). For the median position, al-Maqrīzī uses three allographs: mostly the mudghama shape (roughly like a 'v'), which he largely preferred to the following one split lengthwise  $(mashq\bar{u}qa\ t\bar{u}lan)^{132}$  or, even more rarely, the  $wajh\ al-hirr$ . For the final position, al-Maqrīzī initially (IM) wrote the letter with a counter  $(mar-d\bar{u}fa)$ , but quickly switched to the  $makht\bar{u}fa$  shape, which consists of a small stroke with an acute or wavy angle.

# 5.4.3.1.16 *wāw* (Table 5.17)

Mostly written without counter, the descender of the letter is rather horizontal to the baseline in IM, then leans toward an oblique position. The head of the letter, round in most cases, became more angular when al-Maqrīzī was in his seventies.

Considered here only in its unjoined and its final position, the letter is represented by two allographs: the 'duck'-shaped  $y\bar{a}$ ' ( $majm\bar{u}$ 'a) and the one that turns back ( $r\bar{a}ji$ 'a), <sup>133</sup> where the bowl is replaced by a horizontal stroke going backward and parallel to the baseline. For the former shape, we note that its bowl in the unconnected position is well rounded in IM, while its depth is reduced later, as the letter adopts a more oblique angle. In Lg\*, the letter can be reduced to a long stroke that also represents the word ibn in other circum-

<sup>128</sup> These shapes are reviewed in the sub-section on cursivity.

<sup>129</sup> Gacek, *Vademecum* 319 (no. 53). In 1M, he also uses the shape where the stroke crosses at the head of the letter, a shape known as *murabba* (ibid. 319 (no. 52)).

<sup>130</sup> Ibid. 319 (no. 46).

<sup>131</sup> Al-Ṭayyibī, Jāmiʿmaḥāsin fol. 7b.

<sup>132</sup> Gacek, Vademecum 319 (no. 45); al-Tayyibī, Jāmi' mahāsin fol. 7b.

<sup>133</sup> Gacek, *Vademecum* 319 (nos. 64-5).

MS	Age	b	<b>X</b>	Total	¥	U	Total	2
IM	28	8	3	11 (92%)	1	0	1 (8%)	0 (0%)
IT2	bet. 44-50	10	0	10 (71 %)	2	2	4 (29%)	0(0%)
$G_1$	bet. 49-57	27	5	32 (86%)	0	5	5 (14%)	0 (0%)
Lg*	aft. 50	12	1	13 (30%)	29	2	31 (70%)	0 (0%)
IY	bet. 51–7	24	2	26 (60%)	2	15	17 (40%)	0(0%)
Du	56	13	0	13 (81%)	1	2	3 (19%)	0 (0%)
Lg	63	15	2	17 (100%)	0	0	0(0%)	0 (0%)
Al	aft. 63	28	0	28 (78%)	5	3	8 (22%)	0(0%)
An	aft. 63	24	2	26 (79%)	1	6	7 (21%)	0(0%)
IS	bet. 64-7	2	0	2 (8%)	0	11	11 (44%)	12 (48%)
$L_5$	71	О	0	0(0%)	0	4	4 (29%)	10 (71%)
IA	76-7	0	0	0(0%)	0	11	11 (30%)	26 (70%)
	Total	163 (67%)	15 (20%)	178 (56%)	41 (17%)	61 (80%)	102 (32%)	40 (16%)a

TABLE 5.3 Comparative table of occurrences of *lām-alif* (unconnected and connected)

stances. As table 5.8 demonstrates, al-Maqrīzī does not use allographs indiscriminately. At the beginning of his career (IM), he favors the 'duck'-shaped  $y\bar{a}$ '. Later, with the exception of Du and IY, he clearly prefers the  $r\bar{a}ji'a$ .

# 5.4.3.1.18 $l\bar{a}m$ -alif (Table 5.17)

In their unjoined form, the combination of the two letters can be rendered with one or two independent strokes. In the latter case, both strokes are traced from top to bottom where they connect. With just one stroke, the letter is traced with an intersection on the baseline that is angular ( $warr\bar{a}qiyya$ ) or curved (muhaqqaqa). Al-Maqrīzī does not seem to have used the shape with two strokes: rather he wrote the two forms with the intersection, with a marked preference for the  $l\bar{a}m$ -alif muhaqqaqa as table 5.3 reveals (67%). By contrast, for the connected form of the  $l\bar{a}m$ -alif, he used the  $marsh\bar{u}qa$  form (80%) for an obvious reason: it allowed him to pen the  $l\bar{a}m$  from the ligature and reach the baseline, then raise the pen to add the alif. As for the  $l\bar{a}m$ -alif muhaqqaqa, he had to stop the ligature and raise his hand to trace the intersected stroke, resulting in a ligature that is sometimes quite long (see table 5.17). We must also

a Note that this figure is taken into account for the total number of occurrences together with the two other shapes, but not for the calculation of the sub-total for each of the two other shapes.

<sup>134</sup> It corresponds to the marshūqa and musbala shapes. See Gacek, Vademecum 319 (nos. 62–3).

<sup>135</sup> Ibid. (nos. 59 and 60-1).

note that, toward the end of his life (from IS; see table 5.3), al-Maqr $\bar{\imath}z\bar{\imath}$  adopted a slightly modified form for the  $l\bar{a}m$ -alif (whether connected or not) that seems to derive from the muhaqqaqa shape, in which the combination is traced in one stroke, starting on the left with a curved alif, without the angular or curved intersection on the baseline.

# 5.4.3.2 Ligatures and Idiosyncratic Forms

If the analysis of the shapes of letters and the way they evolve over time reveals several idiosyncrasies that help characterize al-Maqrīzī's handwriting and allow the corroboration or confirmation of identifications, handwriting specialists (both paleographers and experts in handwriting identification) insist that such an analysis must also consider how the letters are connected and what shape specific repetitive words may take. In what follows, before studying three repetitive words, I consider the ligatures between specific letters, and distinguish between the usual and the abusive ones.

Among the letters of the Arabic alphabet, the homograph for  $j\bar{\imath}m$ ,  $h\bar{a}$ ,  $kh\bar{a}$  is one of the most problematic because its shape forces the writer to raise his pen and move it to the left to start to trace the letter. This is of course the case if the writer wants to stay on the baseline. Ligatures are indeed available to bypass the difficulty posed by this letter: this involves writing the preceding letter or letters slightly above the baseline in order to reach the baseline with the homograph or the end of the word. Al-Maqrīzī follows this practice. Interestingly, when the homograph is preceded by a  $l\bar{a}m$  or the homograph  $\Box$ , the way he treats the ligature changed between two periods: the beginning of his career (IM) and the remainder of his life (from IT2). In the first case, the  $l\bar{a}m$  or the homograph  $\Box$  is written perpendicular to the  $\Box$ . In the following years, they generally take the shape of an oblique stroke.

#### 5.4.3.2.2 Abusive Ligatures

The abusive ligatures mainly involve four letters, among which two homographs each represents two sounds, which cannot be connected to the following letter and thus do not offer any ligature, compelling the writer to raise his

<sup>136</sup> See, for instance, IM, lines 2 (ṣaḥīḥ), 5 (al-mujālasa), 14 (shaykhan).

<sup>137</sup> See ім, lines 6 (bi-l-ḥadīth), 7 (la-ḥalaftu).

<sup>138</sup> For instance see IT2, lines 1 (*bi-ḥāra*), 10 (*al-khalīfa*); G1, l. 23 (*al-ḥarb*); IY, l. 2 (*al-khalīfa*); Lg, l. 3 (*taḥt*); Al, l. 1 (*takhāṣamū*); An, l. 5 (*al-jūdariyya*); IS, l. 2 (*tazwīj*); L5, l. 25 (*wa-l-Hārith*); IA, l. 3 (*al-Ḥasan*).

hand to trace the successive letter. These abusive ligatures are attested in the formal writing styles developed by calligraphers<sup>139</sup> and were elaborated in the framework of the chancery. Unsurprisingly, al-Maqrīzī was aware of their existence and used them in certain circumstances. Statistically, the most frequently observed cases concern the final  $d\bar{a}l/dh\bar{a}l$  or  $r\bar{a}'/z\bar{a}y$  followed by the  $h\bar{a}'$  (see table 5.4). In such combinations, al-Maqrīzī wrote the  $h\bar{a}$  as an extension of the  $d\bar{a}l/dh\bar{a}l$  or  $r\bar{a}'/z\bar{a}y$ , giving it the shape of a small circle that closes down inside the preceding letter. As for the waw, al-Magrīzī sometimes connected it to a final  $n\bar{u}n$ .<sup>140</sup> Other abusive ligatures relate to any of the four letters (and for two of them, two homographs) above, as well as the alif in connection with other letters: the *alif* with the homograph  $_{\sim}$ , <sup>141</sup> the  $d\bar{a}l/dh\bar{a}l$ , <sup>142</sup> the  $r\bar{a}^{\circ}/z\bar{a}y$ , <sup>143</sup> the  $s\bar{u}n/sh\bar{u}n$ , <sup>144</sup> the  $l\bar{a}m$ , <sup>145</sup> or the  $n\bar{u}n$ ; <sup>146</sup> the  $d\bar{a}l/dh\bar{a}l$  with the final  $v\bar{a}$ ; <sup>147</sup> the  $rar{a}'/zar{a}y$  with the homograph بالمائية and رامي the  $dar{a}l/dhar{a}l$ , the  $sar{a}d/dad$ , the  $sar{a}d/dad$ , or the  $y\bar{a}$ ; the  $w\bar{a}w$  with the homograph  $^{,153}$  and  $^{,154}$  the  $r\bar{a}$ '/ $z\bar{a}y$ ,  $^{155}$  or the  $h\bar{a}$ <sup>156</sup> The majority of these cases feature in two manuscripts only: IT2, Lg\* but first and foremost in the latter (see fig. 5.12). Abusive ligatures can also affect two words that are connected, but this only appears sporadically.<sup>157</sup>

5.4.3.2.3 The Contraction  $(idgh\bar{a}m)/\text{Curtailment}$   $(ikhtil\bar{a}s)$  of the  $r\bar{a}$  and  $n\bar{u}n$  Treatises on calligraphy specify that the descender of the  $r\bar{a}$  and the bowl of the  $n\bar{u}n$  can be given a specific shape. In the first case, the descender can be contracted (mudghama), meaning that a wavy move is added to give it

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Déroche, Analyser 6.
139
       For example, see G1, l. 4 (ya'tamidūn).
140
       Lg*, l. 4 (Ghurāb).
141
       Lg*, l. 14 ('āda).
142
       тт2, l. 7 (wa-arba і́п).
143
       IT2, l. 20 (Ismā'īl); Lg*, l. 1 (wa-istaqarra).
144
       1T2, l. 14 (bi-l-qabr); Lg*, l. 14 (wa-ʿāda).
145
146
      Lg*, l. 17 (anna).
       An, l. 8 (al-ladh\bar{\iota}).
147
148
       тт2, l. 15 (al-kurab).
149
     Lg, l. 8 ( juriha).
150
      Lg*, l. 11 (bi-mufradihi).
       Lg*, l. 7 (al-marad).
151
      IT2, l. 12 (al-ṭarīq).
152
     Lg*, l. 9 (wa-thamāni mi'a).
153
      Lg*, l. 12 (tawajjaha).
154
       Lg*, l. 15 (al-umūr), l. 17 (mashūratihi).
155
156
       Al, l. 11 ( jaʻalūhu).
```

Like thamāni mi'a (Lg\*, lines 9 and 13).

157

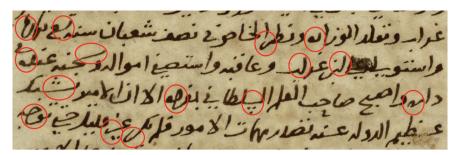


FIGURE 5.12 Occurrences of abusive ligatures, contractions, and  $s\bar{i}n/sh\bar{i}n$  mu'allaqa in Lg\*
(MS 2232)

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TABLE 5.4 Number of occurrences of abusive ligatures and contractions

MS	Age	Abusive ligatures			Contractions		
		ده	ره	ون	بن.	من	ین
IM	28	2 (6)	0(3)	0(2)	5 (13)	o (6)	0 (5)
IT2	bet. 44-50	3(3)	8 (8)	2(3)	2(3)	1 (3)	2 (4)
$G_1$	bet. 49-57	2(2)	3(3)	3(8)	o(2)	6 (13)	0(6)
Lg*	aft. 50	3(3)	2(2)	0 (0)	3 (4)	2(3)	6(7)
IY	bet. 51–7	6(6)	3 (3)	4 (5)	0 (0)	5 (10)	4(7)
Du	56	2(2)	3(3)	o(1)	10 (14)	0 (4)	2 (10)
Lg	63	1(1)	7(7)	o(1)	0 (0)	1 (11)	o(1)
Al	aft. 63	2(2)	o(o)	2(2)	0 (0)	8 (10)	3(3)
An	aft. 63	5 (5)	6(7)	3 (4)	0(7)	2 (6)	1 (1)
IS	bet. 64-7	2(2)	1 (6)	0 (0)	3 (3)	3 (10)	0(1)
L5	71	0 (0)	0 (0)	0 (0)	42 (78)	0 (0)	0 (0)
IA	76-7	0 (6)	0(2)	0 (11)	1 (3)	7 (12)	1 (4)

a hook-like ending.<sup>158</sup> The shape of the letter is also distinguished from its other allograph by its connection to the preceding one in such a way that the passage of one letter to the other is imperceptible. Hence the use of the Arabic word  $idgh\bar{a}m$  to express the coalescence or the fact that two things come together to form one mass. For the  $n\bar{u}n$ , a similar phenomenon is documented

<sup>158</sup> See Gacek, Vademecum 318 (no. 13); Gacek, The Arabic manuscript tradition 24.

Table 5.5 Some examples of contraction  $(idgh\bar{a}m)$  and curtailment  $(ikhtil\bar{a}s)$ 

عر	<i>y.</i> ,	من	عن	ین
Lg, l. 8	Lg*, l. 12	IY, l. 24	1s, l. 9	Lg*, l. 1
1	··	~	عرا	1

but with two possible shapes, called mudghama and mukhtalasa. While in its contracted form (mudghama), the  $n\bar{u}n$  takes a shape quite similar to the  $r\bar{a}$ ' mudghama, though a bit longer, the curtailed  $n\bar{u}n$  (mukhtalasa) does not feature the hook-like ending: its descender is a long oblique stroke. <sup>159</sup> In his opus magnum, al-Qalqashandī specifies that the contraction of the  $n\bar{u}n$  can only apply after three letters of a distinct shape:  $m\bar{u}m$  mu'allaqa, 'ayn mulawwaza, and  $k\bar{a}f$   $mashk\bar{u}la$ . <sup>160</sup>

Al-Maqrīzī uses these shapes in other circumstances too (see fig. 5.13. For the  $r\bar{a}$ ', it appears in the middle of a word or at its end. He seems to prefer the  $n\bar{u}n$ , mostly the mudghama form, when preceded by a  $y\bar{a}$ ' and in some repetitive words, like ibn, min, and 'an. The word ibn is sometimes reduced to a single oblique stroke (see table 5.17). The same phenomenon can be observed for the word 'an in a text mainly composed of traditions. Such idiosyncratic forms result from a simplified writing similar to stenography. The reason he sometimes adopts the mudghama/mukhtalasa form remains to be investigated, but is likely a result of his desire to write more economically by eliminating unnecessary strokes but preserving legibility (see table 5.4 and next sub-section).

#### 5.4.3.2.4 Fixed Shapes

Depending on the genre of text being written or copied, some words are given a particular shape that can be, essentially, regarded as characteristic, though not specific of a given person. One of those frequently used words is certainly  $q\bar{a}la$ . In al-Maqrīzī's hand, the word often takes a specific shape in which the

<sup>159</sup> See Gacek, Vademecum 318 (nos. 43-4); Gacek, The Arabic manuscript tradition 22.

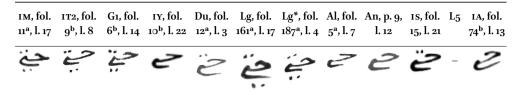
<sup>160</sup> Al-Qalqashandī, Şubḥ al-a'shā iii, 92–3. Al-Ṭayyibī, Jāmi'maḥāsin, fol. 7<sup>b</sup>, gives an example of sīn followed by a nūn mudghama.

<sup>161</sup> In the latter case, it can sometimes even be followed by a final  $h\bar{a}$  with an abusive ligature detailed above.

<sup>162</sup> In 15, where twenty of twenty-two occurrences on a page take this shape.

<sup>163</sup> Wing, Étude 128.

TABLE 5.6 Comparative table of the word *ḥattā* 



alif is curved with its upper part extending toward the right, topping the letter  $q\bar{a}f$  (see table 5.17). Such a fixed shape is rather typical of texts composed of hadīths where  $q\bar{a}la$  is repeated several times on the same page. As already noted by Déroche, this fixed form could play the role of a visual sign that helps to quickly navigate through the text. This is certainly true of hadīth works. Al-Maqrīzī, who was educated in hadīth, certainly learned this fixed form that appears several times per page in IM. In his other manuscripts, the habit was well-established enough to repeat itself even though the nature of the texts changed.

Of course, al-Maqrīzī's propensity for the use of the  $y\bar{a}$ '  $r\bar{a}ji'a$  in all circumstances, after IM, as evidenced above, determines the way words ending with this letter can be rendered. The repetition of some of these words can explain why their shape became characteristic, in a way, of al-Maqrīzī's hand. The following example is certainly one of the most striking. Table 5.6 lists several occurrences of the word  $hatt\bar{a}$  found in each manuscript considered in this study, save for L5. The list shows some interesting features: the rather long ligature that connects the  $h\bar{a}$ ' with the following letter, the  $t\bar{a}$ ', which has the shape of a pointed stroke, sometimes faintly indicated; and finally the  $y\bar{a}$ '  $r\bar{a}ji'a$ .

Also composed of a final  $y\bar{a}$ , the word  $f\bar{\iota}$  offers another case in point. The maximum number of occurrences spotted on a single page in our sample is thirteen (see table 5.8). In the majority of cases listed (88 percent), al-Maqr $\bar{\imath}z\bar{\imath}$  writes the word with a  $y\bar{a}$  ' $r\bar{a}ji$ 'a, which is perfectly understandable given his preference for this shape after IM. Nevertheless, it is once again characteristic with its 'snake'-like shape.

There are other similar fixed forms relating to other words frequently found in those texts, like  $haddathan\bar{a}$ ,  $akhbaran\bar{a}$ , etc.

<sup>165</sup> See Déroche, Analyser 6.

<sup>166</sup> The text deals with the genealogy of Arab tribes and is almost exclusively composed of names. So no occurrence of *ḥattā* could be found in the fourteen leaves.

## 5.4.3.3 Cursivity

Cursivity is an ambiguous term when applied to the Arabic script. It usually refers to a script, e.g., Latin, in which several elements of a letter or a word are written in one move, as opposed to a variation (e.g., printed Latin) that does not offer this possibility. Typically, cursivity is used in relation to a Latin script in which letters are connected one to the other in contrast with the variety of the script in which each letter is written separately. In its essence, Arabic is a cursive script with ligatures for most of the letters and these ligatures have always existed. <sup>167</sup> In this sub-section, I use the term in its etymological sense (meaning, 'to run') in order to address the issue of speed and how it may have impacted al-Maqrīzī's handwriting.

Despite the existence of numerous ligatures to connect letters to each other, Arabic has six letters that cannot normally be joined to the following letter. While limited in number, the frequency of these letters represents about 30 percent of all letters found in a text, with the alif alone accounting for 18 percent.<sup>168</sup> Each time the pen needs to be raised from the baseline to trace such a letter, the writer's movement is consequently slowed. It is not surprising that the chancery—and the calligraphers who elaborated the styles used in this context—tried to increase writing speed by creating various tactics, such as the abusive ligatures. Such tactics were also deployed to limit the number of strokes or moves necessary to write the other letters: for the most part, these included the cancellation of the denticles of the  $s\bar{i}n/sh\bar{i}n$ , the contraction ( $idgh\bar{a}m$ ) of the  $r\bar{a}'/z\bar{a}y$  and  $n\bar{u}n$ , and the backward descender for the  $y\bar{a}'$  ( $y\bar{a}'r\bar{a}ji'a$ ). However, as Déroche emphasized, calligraphers adopted these shapes with a different intent<sup>169</sup> (aesthetics, variety, rhythm, etc.). We know that al-Maqrīzī was educated in calligraphy and that he had a high position in the chancery at the beginning of his career. Thus, it is legitimate to wonder if he used any of the above-mentioned tactics as a way to write more quickly or simply because he had learned them and they were part of his training. I have adopted a statistical approach to address this issue and better identify the reasons that may lie behind his use of the alternative shapes.

We have seen that al-Maqrīzī resorted to the abusive ligatures in a variety of circumstances. The cases most often represented involve the combination of the  $d\bar{a}l$  and  $r\bar{a}$ ' with the final  $h\bar{a}$ '. Table 5.4 shows that the combination with

<sup>167</sup> See Déroche, Analyser 5.

<sup>168</sup> The figures are given in Atanasiu, *De la fréquence* 154 and 156 (*alif*: 18.06%, *wāw*: 7.74%, *rā*': 3.81%, *dāl*: 1.82%, *dhāl*: 1.52%, *zāy*: 0.5%, *lām-alif*: 1.57%). This calculation is based on the Qur'ān.

<sup>169</sup> See Déroche, Analyser 5.

the  $d\bar{a}l$  is present from the beginning (IM), though less often in comparison with the following manuscripts, where it seems to be systematic (that is, all the occurrences of the combination have the abusive ligature), and before it vanishes at the very end of his life (IA).<sup>170</sup> The same comment applies to the  $r\bar{a}$ '. The fact that al-Maqrīzī used these abusive ligatures with parsimony or not at all in IM, where his handwriting is the closest to his calligraphic training, and then almost systematically until his late sixties, is an indication that he perceived these abusive ligatures as a way to hasten his writing.<sup>171</sup> We can draw the same conclusion for the  $w\bar{a}w$  joined to the final  $n\bar{u}n$ : the phenomenon is not attested in IM, but it is in some other manuscripts he wrote before his seventies.

In light of the elements described above, which are clearly linked to the concept of cursivity, we may wonder if the use of the contraction of the  $r\bar{a}$  and the  $n\bar{u}n$  ( $idgh\bar{a}m$ ) can be regarded as another way to increase writing speed. The samples collected on one leaf for each manuscript of the corpus (see table 5.4) show that their interpretation is more difficult. The percentage of occurrences of contractions in combinations like *ibn*, *min*, *īn-ayn* is definitely higher in Lg\*, IT2, and Al, implying that al-Maqrīzī had recourse to these forms for reasons of speed, but in specific circumstances (in the case of Lg\* and Al the first sketches, and the draft for IT2). In the other manuscripts, which largely consist of fair copies, the percentage of their use is lower. However, depending on the number of combinations to be written on one leaf, al-Magrīzī implemented the contraction, though not in a systematic way: for example, in the words ibn in Du, IS, L5 and *min* in G1, IY, IA. The contraction of the  $n\bar{u}n$  in the group  $\bar{i}n$ -ayn is not conclusive in this respect. It is perfectly understandable that repetitive words like *ibn* and *min* would be contracted. Notwithstanding this, we must note that even in a text with almost eighty occurrences of ibn (L5), only half of them are contracted. From this, we might conclude that we have another proof of cursivity that depends on the context. Indeed, the manuscript with the most restrained handwriting, that is closest to the school model (IM), does not include any of these contractions for the words *min* and the ending group *īn-ayn*. If al-Maqrīzī knew these contractions, he did not apply them in this early manuscript.

Other examples support this impression. As indicated in sub-section 5.4.3.2.1., when al-Maqrīzī joined the lām or the homograph  $\lrcorner$  with the homograph  $\jmath$ , he always did this at a 90° angle in IM. In all the other manuscripts, he largely opted to incline each of the two letters that are represented by an

There are examples of this abusive ligature in IA but they are clearly less frequent when compared to the preceding manuscripts (I could find only one case of a  $r\bar{a}$ ' with a final  $h\bar{a}$ ' out of several leaves, and no case for the  $d\bar{a}l$ ; see table 5.17).

<sup>171</sup> As we see below, their disappearance in his seventies might be related to his aging.

oblique stroke. The  $y\bar{a}$   $r\bar{a}ji'a$  is another case in point (see table 5.8) with its move backward, implying fewer hand movements: while this is seldom used in IM (only 12 percent), it is overwhelming in all the other manuscripts (69 percent of the total of occurrences).<sup>173</sup> The same is true for another repetitive word ( $f\bar{i}$ ), which he almost systematically writes with a  $y\bar{a}$ '  $r\bar{a}ji'a$  after IM (in 88 percent of the total of occurrences). In this respect, we must also pay attention to the *kāf*. In its *mabsūta* shape, this letter requires the highest number of hand movements in different directions. As Déroche observed, the use of this shape decreases in writings of a medium or ordinary quality.<sup>174</sup> Al-Magrīzī (see table 5.9) favors the *kāf mabsūṭa* in IM (64 percent), then the *mashkūla* shape takes the lead from IT2,175 and in Lg\* (first sketch) he overwhelmingly (100 percent) overturns the calligraphic rule that specifies that in its unconnected form the  $k\bar{a}f$  must always be  $mabs\bar{u}ta$ . The letter  $s\bar{u}n/sh\bar{u}n$ , with the allographs with or without denticles, also indicates the level of cursivity of a handwriting.<sup>177</sup> Its relevance in this respect can be gauged by comparing the number of occurrences of each shape in the same text (see table 5.7). While in IM al-Maqrīzī always uses denticles, it represents 77 percent in Lg\* (first sketch) and 43 percent in IT2 (draft). In all the other manuscripts, the *muḥagqaga* shape is massively represented (85 percent of the total of occurrences).<sup>178</sup> These figures confirm al-Maqrīzī's preference for the sīn mu'allaqa in unrestrained or less restrained contexts.

All these elements (specific allographs, contraction, inclination) are clearly linked to the issue of cursivity (i.e., speed of execution), as the occurrences listed demonstrate. Not all of them are necessarily applied in all circumstances, as we see, but a perusal of the number of occurrences is helpful to identify what these circumstances are (first sketches, drafts). In what follows, I tackle the issue of identifying the circumstances in which al-Maqrīzī's handwriting is more or less restrained.

This inclination, also observable in the beginning of words starting above the baseline (with an average angle of 5–10°), is another criteria of cursivity as observed by Déroche, Analyser 5.

In some cases, al-Maqr $\bar{z}$  clearly restrains his handwriting: for example, in IY and Du, the number of  $y\bar{a}$  'mabs $\bar{u}ta$  is proportionately inverted in comparison with the remainder (respectively 47 percent and 65 percent).

<sup>174</sup> Déroche, Analyser 6.

<sup>175</sup> Here again, al-Maqrīzī exerts a greater control of his handwriting, like in 1s, where both shapes are equally used.

<sup>176</sup> See above 173.

<sup>177</sup> See Déroche, Analyser 5.

<sup>178</sup> Even in Al, which is a first sketch though different in nature than Lg\*, as al-Maqrīzī is composing the text based on one of his résumés. Thus, in this case, he is largely copying the text.

Table 5.7 Comparative table of occurrences of  $s\bar{i}n/sh\bar{i}n$  muhaqqaqa and mu'allaqa

MS	Age	***	
IM	28	41 (100%)	0 (0%)
IT2	bet. 44-50	16 (57%)	12 (43%)
$G_1$	bet. 49-57	41 (100%)	0 (0%)
Lg*	aft. 50	7 (23%)	23 (77%)
IY	bet. 51–7	45 (80%)	11 (20%)
Du	56	48 (92%)	4 (8%)
Lg	63	43 (96%)	2 (4%)
Al	aft. 63	66 (99%)	1 (1%)
An	aft. 63	34 (97%)	1 (3%)
IS	bet. 64-7	27 (73%)	10 (27%)
L5	71	26 (87%)	4 (13%)
IA	76-7	34 (87%)	5 (13%)
	Total	444 (85%)	77 (15%)

Table 5.8 Comparative table of occurrences of  $y\bar{a}$ ,  $mabs\bar{u}ta$  and  $r\bar{a}ji'a$  and of the two shapes of  $f\bar{t}$ 

MS	Age	S	4	می	٤
IM	28	23 (88%)	3 (12%)	2 (100%)	0 (0%)
IT2	bet. 44–50	7 (33%)	21 (67%)	1 (17%)	5 (83%)
$G_1$	bet. 49–57	11  (25  %)	33 (75%)	1 (7%)	13 (93%)
Lg*	aft. 50	4 (11%)	32 (89%)	1 (8%)	12 (92 %)
IY	bet. 51-7	16 (47%)	18 (53%)	2 (18%)	9 (82%)
Du	56	17 (65%)	9 (35%)	1 (13%)	7 (87%)
Lg	63	3 (12.5%)	21 (87.5%)	1 (17%)	5 (83%)
Al	aft. 63	6 (33%)	12 (67%)	0 (0%)	6 (100%)
An	aft. 63	16 (36%)	29 (64%)	1 (8%)	11 (92%)
IS	bet. 64-7	6 (12%)	43 (88%)	1 (14%)	6 (86%)
$L_5$	71	10 (30%)	23 (70%)	2 (13%)	13 (87%)
IA	76-7	3 (9%)	30 (91%)	0 (0%)	10 (100%)
	Total	122 (31%)	274 (69%)	13 (12%)	97 (88%)

FIGURE 5.13 An almost similar line in three different manuscripts  $Note: 1: Lg, fol.\ 162^a, l.\ 7; 2: Al, fol.\ 5^a, l.\ 1; An, p.\ 471, ll.\ 13-4. \ The text reads:$ 

(1 ان الزاني يقتل باحصان وبغير احصان ومن لاط
 (2 ان من زنا قتل ولم يفرق بين المحصن وغيره ومن لاط
 (3 ان من زنى قتل ولم يفرق بين المحصن وغير المحصن ومن لاط.

# 5.4.3.4 Circumstances

The nature of the text being written is one of the factors that impacts writing. If the writer is composing a literary piece, he is involved in a reflexive and creative process, while if he is writing a personal letter, he is calling upon his emotional expression. Yes When he limits himself to copying a text (a fair copy or someone else's text), his writing will be the result of a mechanical process, one in which he can better control his hand. Is a landarīzī's case, we have a variety of circumstances in which he is composing a personal text, summarizing a source, producing a draft, preparing a fair copy, or even just copying someone else's text. Rhythm and pressure are elements that reveal a great deal about these circumstances.

As for rhythm, we can consider three interrelated texts that reflect three different processes: (1) a résumé that al-Maqr $\bar{z}\bar{z}$  wrote while reading the source (Lg); (2) a sketch of a text he produced on the basis of the résumé (Al); (3) the fair copy of the section based on the sketch (An). In order to compare similar examples, I selected a succession of words that are similar in the three texts (see fig. 5.13).

In step 1 (Lg), the writing can be characterized as restrained: the words are largely written on the baseline, the shafts (*alif*,  $l\bar{a}m$ ) slant slightly to the right, the text is devoid of abusive ligatures and includes just one contraction ( $r\bar{a}$ ' in final position in *wa-bi-ghayr*; the  $n\bar{u}n$  in the *min* is not affected). In step 2 (An), the phrasing changes a bit and the general look of the writ-

<sup>179</sup> Berrichon-Sedeyn, Acte mécanique 223.

<sup>180</sup> Ibid., 225.

Table 5.9 Comparative table of occurrences of *kāf mabsūṭa* (left) and *mashkūla* (right)

MS	Age			4		
		Connected with following letter	Connected with both letters	Connected with preceding letter	Unconnected	Total
IM	28	9 (39%)	12 (86%)	5 (100%)	3 (100%)	29 (64%)
IT2	bet. 44-50	4 (33%)	3 (43%)	0 (0%)	1 (100%)	8 (35%)
$G_1$	bet. 49-57	7 (33%)	8 (40%)	1 (8%)	0 (0%)	16 (29%)
Lg*	aft. 50	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
IY	bet. 51-7	5 (22%)	4 (27%)	6 (100%)	2 (100%)	17 (37%)
Du	56	1 (8%)	0 (0%)	0 (0%)	1 (100%)	2 (7%)
Lg	63	0 (0%)	2 (40%)	0 (0%)	2 (100%)	4 (20%)
Al	aft. 63	10 (38.5%)	7 (58%)	3 (37.5%)	0 (0%)	20 (43%)
An	aft. 63	4 (12%)	0 (0%)	0 (0%)	1 (100%)	5 (9%)
IS	bet. 64-7	3 (37.5%)	9 (64%)	1 (33%)	0 (0%)	13 (52%)
$L_5$	71	7 (54%)	2 (67%)	1 (8%)	1 (100%)	11 (38%)
IA	76-7	10 (45%)	6 (55%)	0 (0%)	1 (100%)	17 (39%)
	Total	60 (28%)	53 (39%)	17 (20%)	12 $(86\%)$	142 (32%)

	Connected with both letters	Connected with preceding letter	Unconnected	Total
14 (61%)	2 (14%)	0 (0%)	0 (0%)	16 (36%)
8 (67%)	4 (57%)	3 (100%)	0 (0%)	15 (65%)
14 (67%)	12 (60%)	12 (92%)	1 (100%)	39 (71%)
12 (100%)	15 (100%)	5 (100%)	1 (100%)	33 (100%)
18 (78%)	11 (73%)	0 (0%)	0 (0%)	29 (63%)
10 (92%)	5 (100%)	11 (100%)	0 (0%)	26 (93%)
9 (100%)	3 (60%)	4 (100%)	0 (0%)	16 (80%)
16 (61.5%)	5 (42%)	5(62.5%)	0 (0%)	26 (57%)
30 (88%)	15 (100%)	5 (100%)	0 (0%)	50 (91 %)
5 (62.5%)	5 (36%)	2 (67%)	0 (0%)	12 (48%)
6 (46%)	1 (33%)	11 (92%)	0 (0%)	18 (62%)
12 (55%)	5 (45%)	10 (100%)	0 (0%)	27 (61%)
154 (72%)	83 (61%)	68 (80%)	2 (14%)	307 (68%)

ing betrays some tension: the line is striking in its inclination, an impression strengthened by the fact that some words begin above the baseline and the shaft of some *alifs* slant significantly to the right; the text presents a case of abusive ligature (wa-ghayrihi) and two contractions (two mins and at the end of al-muhsin); the compactness of the line is conspicuous (this is achieved by starting new words above the endings of the previous ones); the  $l\bar{a}m$ -alif features a kind of  $tarw\bar{i}s$  to the left. In the third step (An), in which al-Maqrīzī is preparing the fair copy, we note that even though the beginning of some words starts above the line, the words stick more closely to the baseline; the shafts of the alifs and  $l\bar{a}ms$  lean slightly toward the right; the contractions of the  $n\bar{u}n$  have vanished, apart from the presence of contractions in the  $r\bar{a}$  (two cases); and the words are more spaced out, making the line less compact.

Step 2 clearly demonstrates that when he is involved in a creative process, al-Maqrīzī paid less attention to his handwriting even though, in this case, it is a composition of a first sketch on the basis of a résumé; thus, he is largely copying material he had already, in a sense, digested. Lg\*, which consists of a biographical notice of one of his contemporaries, definitely tallies more closely with what could be defined as a personal text, one in which he is largely drawing inspiration from personal recollections (see fig. 5.37). We have already noted that this text presents the highest number of abusive ligatures and other phenomena identified with speed of execution. <sup>181</sup>

These circumstances reveal situations in which al-Maqr $\bar{\imath}$ z $\bar{\imath}$ 's hand is less restrained. There are other traces that help to assess the rhythm of his writing. Some of the cases of abusive ligatures that are identified in Lg\* certainly contribute to our understanding of this issue (see fig. 5.12). Another element that helps us to appreciate his rhythm relates to the stroke that precedes unconnected letters with heads that start above the baseline and require that the pen be raised (typically the  $d\bar{a}l/dh\bar{a}l$  and the  $l\bar{a}m$ -alif). When these letters are preceded by another letter that requires a downward move, one notices that in the move that brings the pen from below the baseline up to the point where the head of the letter must be traced, it touches the surface earlier and leaves a somewhat long stroke in the case of the  $l\bar{a}m$ -alif and a shorter one for the  $d\bar{a}l/dh\bar{a}l$  (see table 5.10). Although we cannot find this example in IM, the first example to the left illustrates how the move impacted the way al-Maqr $\bar{\imath}z\bar{\imath}$  lengthened the descender of the  $w\bar{a}w$  almost to the point that it joined the alif.

<sup>181</sup> See above 182.

TABLE 5.10 Examples of *lām-alif* and of *dāl* with a hanging stroke

IM, fol. 2 <sup>a</sup> , l. 24	1T2, fol. 7ª, l. 4	IT2, fol. 6 <sup>b</sup> , l. 6	Lg, fol. $7^{\rm b}$ , l. 21 $(thal\bar{a}th)$	Lg, fol. 7 <sup>b</sup> , l. 16
(wa-lā)	(awlād)	(wilāyatihi)		(wa-yaruddu)
3	اواد	وايد	236	ويرد

TABLE 5.11 Examples of pressure causing the widening of the nib



These features reveal that al-Maqrīzī was writing with a certain energy. In addition, they are idiosyncratic of his handwriting in certain circumstances. 182

Pressure can also betray the circumstances and the conditions in which al-Maqr $\bar{\imath}z\bar{\imath}$  wrote. In the case of haste, the pressure the hand exerted on the reed pen widens the two parts of the nib. This widening leaves a white line between the two sides of the letters, as evidenced in table 5.11. This phenomenon is notably, but not exclusively, conspicuous in IT2 (a draft copied when al-Maqr $\bar{\imath}z\bar{\imath}$  was in his mid-fifties) and L5 (a text copied by al-Maqr $\bar{\imath}z\bar{\imath}$  when he was in his early seventies).

#### 5.4.3.5 *Aging*

The aging process usually impacts a person's writing, though this depends on the state of health of the subject. In the analysis of writing, a number of factors should be taken into account: illness, visual disorders, joint problems, and shaking. Among the phenomena observed, scholars have identified examples of micrography, in which smaller letters are used at the beginning and ending of

<sup>182</sup> We could also consider how the bar of the kāf mashkūla is added in a second move: the connection of the bar to the body can vary (i.e., be connected, unconnected, or cut through it).

lines, or the lines are not straight.<sup>183</sup> Writing specialists insist that these factors do not inevitably follow a downward curve, and that the analysis of handwriting must consider any variation that may be linked to any of these factors.<sup>184</sup>

Given our corpus, which includes large samples of al-Maqrīzī's writing activity in his seventies, we are in a good position to observe if phenomena linked to some of these factors can be shown. We do not know if he had visual problems that required spectacles at such an advanced age. But we do know that he is said to have died after a long illness. Whatever this illness may have been, apparently, it did not impair his ability to write, as he managed to complete the fair copy of his last major opus—three volumes totaling some seven hundred leaves—during the last eight months of his life. The results of the comparison of several of the elements outlined in the preceding sub-sections reveal that around age sixty-five (from 1s) al-Maqrīzī's movements became hampered.

First, his words are not aligned with the baseline: the beginning of several words in the line are written at an angle between 10 and 15°. Most letters adopt the same angle. He same are trend is accompanied by a slant toward the right for letters with a shaft (alif,  $l\bar{a}m$ ). The axis of the curve of the isolated  $d\bar{a}l/dh\bar{a}l$ , which begins to rise with IT2, reaches its apex from Is up to IA. Letters with a curve (connected  $d\bar{a}l/dh\bar{a}l$ , connected and unconnected  $r\bar{a}$ '- $z\bar{a}y$ ) see this curve reduced to a stroke that becomes straighter from IS. The denticles of the  $s\bar{u}n$ - $sh\bar{u}n$  hardly ascend from the flat base of the letter.

Al-Maqrīzī seems to experience more difficulty with long curves too. This is noticeable in the bowls of the  $s\bar{i}n/sh\bar{i}n$ ,  $s\bar{i}ad/d\bar{a}d$ ,  $q\bar{a}f$ ,  $n\bar{u}n$ , and  $y\bar{a}$  in their unconnected or final positions: the curve is characterized by an angular shape at the end of the bowl. Instead of closing the bowl with the second part of the curve once he reaches the lower part of the descender, al-Maqrīzī completes it with a straight stroke going upward (see the  $n\bar{u}n$  in table 5.11, right). The same observation can be made regarding the  $l\bar{a}m$ -alif: al-Maqrīzī drops the  $warr\bar{a}qiyya$  and the muhaqqaqa shapes in favor of a shape derived from the former, as if he wanted to avoid the round intersection at the level of the

<sup>183</sup> See Stiennon's remark, in Sirat et al., *L'Écriture* 75–6.

<sup>184</sup> See, for instance, Berrichon-Sedeyn, Acte mécanique 223.

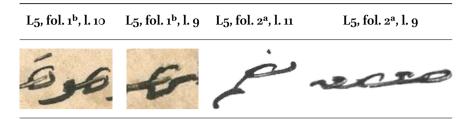
<sup>185</sup> Spectacles were known in Egypt and Syria from the eighth/fourteenth century. They were imported from Europe where they were produced. See Mazor and Abbou Hershkovits, Spectacles.

<sup>186</sup> Al-Sakhāwī, al-Daw' al-lāmi' i, 25 (ba'd maraḍ ṭawīl).

<sup>187</sup> See the appendix. Besides his copying activity, al-Maqrīzī continued to hold sessions at home, to transmit texts, up to one month before his death. See Bauden, *Al-Maqrīzī's collection*, chap. 1.

<sup>188</sup> See tables 5.14–17, all the letters with elongated bodies.

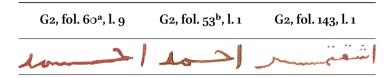
TABLE 5.12 Examples of coordination problems



baseline. The final  $h\bar{a}$  connected to a  $r\bar{a}$  / $z\bar{a}y$  with an abusive ligature confirms that al-Maqrīzī, at that point, had a problem with round shapes or loops: the  $h\bar{a}$ ' is traced in three moves, instead of just one, giving the letter a quadrangular shape. In any case, such abusive ligatures for the  $d\bar{a}l/dh\bar{a}l$  and  $r\bar{a}$ '- $z\bar{a}y$  were no longer the norm at the very end of his life, as they tended to fall into disuse (see table 5.17 for IA). With its curves, the  $h\bar{a}$ ' (unconnected, initial, and medial positions) represented a challenge for an old man. Several samples demonstrate that al-Maqrīzī struggled with the circular movements. In its unconnected position, we have seen that the  $h\bar{a}$  becomes flatter, with the circle sometimes remaining open. For the initial and median positions (see table 5.12), al-Maqrīzī tried to solve the problem of the multiple curves indicated by the cat face allograph by first tracing an imperfect—often incomplete—circle, then raising the pen to trace the central stroke whose extension constitutes the ligature for the next letter. Another interesting case relates to the fragmentation of a word into several segments instead of writing it with one stroke. Two examples containing the letter  $s\bar{a}d/d\bar{a}d$  (table 5.12) are meaningful. In the first case (*bi-damm*), al-Maqrīzī first traced the first two letters, stopping at the juncture of the flat loop of the  $d\bar{a}d$ . He then raised the pen and put it down at the end of the  $d\bar{a}d$ to trace the final letter. In the second case ( $\S a \S a `a)$ , we can observe the same move: he wrote the first  $s\bar{a}d$  with a long extension to the second  $s\bar{a}d$ . The medial 'ayn was added in a second move, like an inverted 'L'. Finally, in one move, he added the last two letters, shaping the second 'ayn in a normal way. All these features betray a problem in coordination that can be typical of old persons.

Trembling, another factor that can go along with aging, can also affect hand-writing. Tremors produce dents, particularly in long strokes. Despite the coordination problem described above, al-Maqrīzī's hand was not shaky, not even in the manuscripts he copied at the end of his life. We do not have evidence of this because of the absence of long strokes in most manuscripts selected from the corpus. Nevertheless, we can spot at least one case in L5 (see fig. 5.35), copied when he was seventy-one years old, where the initial letter ( $\hbar \bar{a}$ ) of the first word on l. 4, written in red ink, shows some undulation. The most telling exam-

TABLE 5.13 Examples of tremor



ples of tremor can be found in G2—which was not incorporated in the corpus because we lack a precise date. The text consists of biographies, some of which al-Maqrīzī added at the very end of his life, with the first name usually written in red ink with long strokes between some letters. For a biography penned earlier in his life (table 5.13, center), the elongation is steady, but in two other cases (table 5.13 left and right), dents are conspicuous all along the long stroke. Despite the body of evidence provided by the large number of manuscripts for the late period, these examples prove that al-Maqrīzī's hand was shaky at the end of his life and that he had difficulties controlling this impairment when he had to trace long straight lines.

## 5.4.3.6 The Characteristics of al-Magrīzī's Handwriting

We can outline some common characteristics of al-Maqrīzī's handwriting. One regards the average angle of the bar for the  $k\bar{a}f$   $mashk\bar{u}la$  which almost invariably corresponds to 30° (with a maximum of 35°). The formats of the volumes indicate some habits. Two formats are concerned: (1) one for the notebooks, drafts, independent résumés, mostly but not exclusively composed of reused chancery paper, with a justification from 140 to 180 in height  $\times$  from 120 to 160 in width and with chiefly twenty lines to the page; and (2) one for the (fair or working) copies with a justification from 180 to 200 in height  $\times$  from 110 to 120 in width with twenty-seven lines to the page before 832/1428 and twenty-five afterward. Some orthographic habits, like the stutter of the  $l\bar{a}m$  in the past form of the verb allafa, are idiosyncratic.

With the exception of these common characteristics, the earliest manuscript (IM) clearly stands apart from the rest of the corpus. The handwriting in IM can be described as a controlled and careful one, in which al-Maqrīzī pays attention to the outcome: the text is taut with letters like guardsmen on parade. The shaft of tall letters (alif,  $t\bar{a}'/z\bar{a}'$ ,  $l\bar{a}m$ ) is mostly perpendicular to the baseline. Letters with bowls have almost perfect half circles. The words are generally aligned with the baseline and regularly spaced. In the case of a word containing the homograph  $\tau$ , the word starts above the line, but remains aligned horizontally with the baseline. Al-Maqrīzī also uses abusive ligatures, but in limited circumstances. Contractions are not utilized. In his early years, he definitely favored

the  $y\bar{a}$ '  $mabs\bar{u}$ ta over the  $y\bar{a}$ '  $r\bar{a}$ ji'a and the  $k\bar{a}$ f  $mabs\bar{u}$ ta over the  $k\bar{a}$ f  $mashk\bar{u}$ la. These features demonstrate that al-Maqrīzī maintained the models he studied at school in his childhood and during his secondary education when he learned calligraphy, and even though early on his handwriting can be described as individual, it shares some characteristics with the traits we recognize in al-Maqrīzī's later manuscripts.

In his late forties (with IT2), in the interval that separates IM from IT2, we can note that al-Maqrīzī's handwriting clearly underwent some developments. These were accompanied by an evolution in his handwriting, one that was characteristic until the end of his life. The alignment of the words with the baseline tends toward an oblique angle, with the beginning of words written at some distance above the baseline, and the ending joining it. The beginning of words frequently starts at the ending of the preceding word, strengthening an impression of compact lines and tilting in the handwriting. The slant to the right of stems (alif,  $t\bar{a}'/z\bar{a}'$ ,  $t\bar{a}m$ ) adds to the obliqueness of other letters ( $b\bar{a}'/t\bar{a}'/th\bar{a}'$ ,  $d\bar{a}l/dh\bar{a}l$ ,  $s\bar{i}n/sh\bar{i}n$ ,  $s\bar{a}d/d\bar{a}d$ ,  $q\bar{a}f$ ) increased with the passage of time and also contributes to this impression. Al-Maqrīzī also shows his preference for some allographs, like the yā' rāji'a that almost becomes the norm (with the exception of IY and Du). He also favors the lām-alif muḥaqqaqa when unconnected and the *lām-alif marshūqa* when joined. The *kāf mashkūla* also seems to be the norm, except when it is in an unconnected position; in this circumstance, al-Maqrīzī maintains the calligraphic model that imposes the *kāf mabsūta*. In its final position, the  $h\bar{a}$ ' is written in the  $makht\bar{u}fa$  shape, i.e., like a circumflex. The connection of a  $l\bar{a}m$  or of the homograph  $\omega$  with the homograph  $\omega$  largely came to be written like an oblique stroke and not more at a 90° angle, like in IM. Al-Maqrīzī also had greater recourse to abusive ligatures as well as contractions  $(idgh\bar{a}m)$  for the  $r\bar{a}'/z\bar{a}y$  and final  $n\bar{u}n$ , and to the  $s\bar{i}n$  mu'allaqa (without denticles), though these phenomena tend to diminish in his late seventies. Quite often, two letters (the alif in the  $l\bar{a}m$ -alif combination and the  $d\bar{a}l/dh\bar{a}l$ ) are preceded by a stroke generated by the movement of the pen coming from below the baseline, in the wake of the preceding letter (typically with a descender).

The nature of the text may also have impacted the handwriting. Drafts (IT2) and first sketches (Lg\*, Al) contain more examples of abusive ligatures and contractions than any other manuscripts. In such cases, the handwriting is less restrained and shows the effects of pressure where the sides of the nib widens, leaving a blank line in the middle of the stroke that composes the letter.

In his seventies, al-Maqrīzī faced health problems that hindered his movements. Curves tend to become more angular (this is conspicuous in the way he writes the  $d\bar{a}l/dh\bar{a}l$ ,  $r\bar{a}'/z\bar{a}y$ , the bowls of the  $s\bar{c}n/sh\bar{c}n$ ,  $s\bar{c}ad/d\bar{a}d$ ,  $n\bar{u}n$ ). Al-Maqrīzī encountered difficulties in tracing circular movements, like full loops (he gave

up the two shapes of  $l\bar{a}m$ -alif that he used throughout his career, opting instead for a new shape that is easier to write; the initial  $h\bar{a}$  is written in two steps with a broken circle; the abusive ligatures and the contraction of the ending of the  $r\bar{a}$  / $z\bar{a}y$  and the  $n\bar{u}n$  fall into disuse). Words are also written progressively, in small segments. The long straight horizontal strokes also reveal tremors.

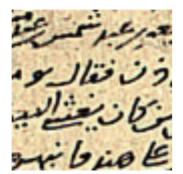
#### 5.5 The Future

In the preceding section, I tried to delineate, in an empirical and analytical way, the main characteristics of al-Maqrīzī's handwriting in the widest gamut of circumstances. In so doing, I hope to make it easier for others to ascertain whether or not a given manuscript or note can be attributed to this author with some certainty. A sample of his handwriting can now be straightforwardly compared to the physical and material features just outlined. At the same time, my description is also intended to allow others to verify the validity of my identifications, which can be challenged on the basis of objective elements. In this respect, the contributions of the digital humanities are worth considering. In this matter, as in many others, the future seems to be upon us. Face recognition systems by artificial intelligence are a reality. Researchers validly argue that if computers can identify a human face in a crowd, they can certainly also differentiate between two handwritings. Over the last decade, computer scientists have developed various systems based on algorithms that are designed to authenticate handwriting in medieval manuscripts. 189 Unfortunately, the results garnered to date are far from satisfying, to say the least.

In Spring 2015, Alexander Knysh (University of Michigan) put me into contact with a team of Russian computer scientists who had created a program to verify whether or not a manuscript is in the handwriting of a specific author. They wanted to work more specifically on al-Maqrīzī's writing, particularly given the holograph that had been identified in the holdings of the University of Michigan a few years before. In contrast to the programs developed so far, the Russian algorithm created by Andrei Boiarov and Alexander Senov involves deep learning and works with a convolutional network on the basis of an analysis of consecutive patches. Two types of patches are taken into consideration: connected components, i.e., groups of letters, and a fixed-size sliding window, i.e., an image split into patches of fixed-size cells (see fig. 5.14).

See the references quoted in the introduction to this volume, as well as in Boiarov et al., Arabic manuscript 1, notes 2–6.

<sup>190</sup> Boiarov et al., Arabic manuscript 1.



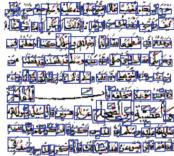


FIGURE 5.14 A sliding window patch (left) and patches of connected components (right)

BOIAROV ET AL., ARABIC MANUSCRIPT 3, FIGS. 3-4

The algorithm was first trained with twenty-six pages of An and a negative set of seven pages selected from five manuscripts that are not in al-Maqrīzī's hand, but are contemporaneous with him (ninth/fifteenth century). It was then tested with fourteen pages of An and another set of seven pages from three contemporaneous manuscripts by another hand and different from the manuscripts used in the first training step. I also shared several reproductions of some of al-Maqrīzī's other holographs. Once tested, the algorithm analyzed pages of An and compared that with the same corpus used in the testing level. It appeared that the level of accuracy for the sliding window patch was higher than for the connected components (87 percent against 80 percent). The former gave a result of 94 percent of probability that An was in al-Maqrīzī's hand and of 0.85 percent for another manuscript, corroborating that An is in al-Maqrīzī's hand. With some correction, the authors of the study concluded that the algorithm identified the handwriting with a precision of 99 percent. An analysis of the connected components revealed that the method was less credible, as it generated "many false positive predictions." 191 Nevertheless, the results were deemed promising for future developments.

The level of accuracy of the authentication of An was clearly thrilling. For the first time, an algorithm was apparently able to corroborate my identification. I thus wanted to push the analysis further by using some leaves from the draft of *al-Khiṭaṭ* (IT2) that are not in al-Maqrīzī's hand, leaves that I consider to be in al-Awḥadī's hand, on the basis of external (paleography) and internal (masters) elements. <sup>192</sup> I asked Andrei Boiarov to submit some of those leaves

<sup>191</sup> Ibid. 3-4.

<sup>192</sup> See above, 142.



FIGURE 5.15 The word madrasa penned by al-Awḥadī (MS Emanet Hazinesi 1405, fol. 96b, l. 10 (left); fol. 98b, l. 1 (right))

ISTANBUL, TSMK

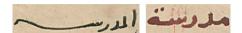


FIGURE 5.16 The word *madrasa* penned by al-Maqrīzī (right) (MS Emanet Hazinesi 1405, respectively fol. 97<sup>a</sup>, l. 12 (left); fol. 96<sup>b</sup>, l. 9 (right))

ISTANBUL, TSMK

and I advised him that the handwriting of both scholars sometimes features on the same leaf. The result was quite astonishing to me: according to the algorithm, both handwritings were attributed to al-Maqrīzī with a very high level of accuracy (more than 90 percent). The differences that I could see in the two handwritings were apparently not critical for the algorithm. I drew Boiarov's attention to the particular features that help me to distinguish between the two handwritings. I pointed to the noticeable difference that one can observe in the writing of the word madrasa, which appears more that thirty times in the twenty leaves in question. In most cases (see fig. 5.15, left), al-Awḥadī writes the word with a elongated  $s\bar{i}n$  devoid of its denticles (mu'allaqa) and ends it with a  $h\bar{a}$ ' in the shape of a drop. In rare cases (see fig. 5.15, right), the word is written in a more controlled way: in such cases, the denticles of the  $s\bar{i}n$  are well delineated, thin, and pointed, while the  $h\bar{a}$ ' takes the shape of a triangle ( $mard\bar{u}fa$ ). The first form is obviously idiosyncratic of the person who penned those lines and was never identified in any of al-Maqrīzī's other holographs.

When he wrote the word on these twenty leaves, al-Maqrīzī used both shapes, but with conspicuous differences: in the case of the elongated  $s\bar{u}n$  (see fig. 5.16, left), the denticles are clearly traced with a final  $h\bar{a}$ ' that looks like a hook ( $makht\bar{u}fa$ ) while in the other more restrained example (see fig. 5.16, right), the shape of the final  $h\bar{a}$ ' is round with a closed counter. In both cases, the denticles of the  $s\bar{u}n$  are not pointed, as they are in al-Awḥadī's case. Compared with al-Awḥadī's  $s\bar{u}n$  (fig. 5.15, right), we can also see that the base of al-Maqrīzī's  $s\bar{u}n$  is, in both cases, flat on the baseline and does not present the characteristic indentations. The average angle of the  $k\bar{u}n$   $mashk\bar{u}n$  also reveals a neat discrepancy:  $40^\circ$  for al-Awḥadī versus  $30^\circ$  to  $35^\circ$  for al-Maqrīzī.

<sup>193</sup> See above, 162.

To further challenge the program, in mid-July 2016 I requested that a wider sample of handwritings be analyzed. I specifically selected some handwritings that differ significantly from those of al-Maqrīzī and al-Awḥadī, and I added some handwritings that were closer to al-Awḥadī's handwriting. The sample was anonymized, i.e., I submitted the reproductions without communicating the identity of the writers. The sample was composed of nine manuscripts (see figs. 5.17-5.25).

A few days later, I was informed of the following results: A = 97%, B = 79%, C= 100 %, D = 12 %, E = 82 %, F = 0 %, G = 72 %, H = 0 %, I = 50 %, with the percentage indicating the probability that a text is in al-Maqrīzī's hand. 194 These results call for some remarks. First, A, which is in al-Awhadī's hand, is considered, with a very limited margin of doubt (3 percent), to be in al-Maqrīzī's hand, like C, which is truly a holograph of al-Maqrīzī (100 percent). Then, three manuscripts (D, F, and H) are rejected even though the leaf selected in H (o percent) contains seven lines in al-Maqrīzī's hand. The analysis of E is of greater concern: copied by an unkwown copyist, but not al-Maqrīzī, it is considered, with a high probability, to be a holograph of al-Maqrīzī (82 percent). Finally, the algorithm considered I, which is entirely in al-Maqrīzī's hand, dubious (with a probability of 50 percent). 195 These results demonstrate that while the algorithm can be trusted in some cases, it is entirely unreliable in others. In order to refine the analysis of the algorithm, the programmer should take into consideration several factors, among them, the width of the nib, certain connected letters with idiosyncratic shapes (like the  $l\bar{a}m$ -alif), and even the average angle of the stroke of the *kāf*.

In my mind, there remains little doubt that, once they are well trained and refined, such programs will be able to identify (within a small margin of error) handwritings in manuscripts. But there are caveats that indicate that entirely replacing human expertise may never be possible. The samples of someone's handwriting must be large and varied enough to avoid erroneous identifications or rejections, something that is possible in the case of al-Maqrīzī (both in terms of age and variety of circumstances), but not in the case of al-Awḥadī (we have twenty leaves dating from the same period and a few words in a limited number of ownership marks and consultation notes). In other words, the critical mass of data is central to the process. Even if we have numerous holographs from the Islamic world, there are few cases in which we have a varied and

<sup>194</sup> Personal communication in email dated 20 July 2016.

<sup>195</sup> The analysis also gives a lower result for B and G (under 80 percent) even though both manuscripts are al-Maqrīzī's holographs.

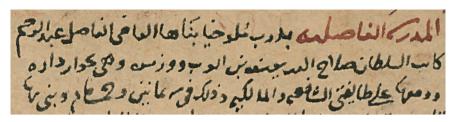


FIGURE 5.17 A: IT2 (MS Emanet Hazinesi 1405), fol. 83ª (with the exception of two words added in the margin by al-Maqrīzī, the leaf, contains nineteen lines in al-Awḥadī's hand)

ISTANBUL, TSMK

العنا مذعندونعدمد العباكرونوية بنطب الاوياس فسوء وغير برفاطه واخفه الافضل الجزن وصف للادل واحض الجناف الجهدال واحض المجناف الجهدال واحض الجناف المورد الجرن

FIGURE 5.18 B: ITI (MS Emanet Hazinesi 1405), fol. 54<sup>b</sup> (entirely in al-Maqrīzī's hand) ISTANBUL, TSMK

الهي وقد فادر سبع سندو توفي في العضاء مع لدرا موالعاس عمد الرعن في في العصاه ماج الديولي مجمع عبدالوها وسرطف والكلمام العلام السيسر ما برينت الاعزالشافع بالعاه كان عالما رسسا الهاستروضي مشاكو والسيرمزافول والدهر ومرسع رمن سات

FIGURE 5.19 C: Du (MS 1790), fol. 77<sup>b</sup> (entirely in al-Maqrīzī's hand)
DUSHANBE, KITOBHONA-I MILLI-I TODJIKISTON

rich corpus like al-Maqrīzī's. In addition, whenever two different handwritings appear on the same leaf (H), the program is apparently unable to distinguish between them. This weakness is problematic, if one wants to authenticate a marginal note or just a few words in the hand of a given scholar. Moreover, such programs cannot analyze some material features that are key to the identification process, such as the paper (structure) and the pressure of the pen, unless they are provided by the researcher. This means that, ultimately, the human eye remains the best tool in this field, though clearly, confirmation from a program will be helpful, particularly in cases where an expert is not (anymore) at hand.

وكانتماره واختما مرضيعه مرعل نصنائع ف بخف مرصعيده مركانتالها أما في العبط عظم وجال مع لم يكن عمل حسن منهما وخصما مجبوباً بقاله ما تور ويتال انداخوما ربع وكبريت تحدمها ومات المدنية له و بعلد شبها ساها

FIGURE 5.20 D: MS 702, fol.  $2^{\rm b}$  (al-Dhakhāʾir wa-l-tuḥaf, entirely in Ibn Duqmāqʾs hand) Afyon Karahisar, gedik ahmet paşa kütüphane

بر بوسی زعیب بر عدا بر عامل به جدا نه از در بعد از خوارد برعوف برعا مربز عتبل کعب بر در بیعه ابر عامر برصع صعبر نعوم بر بکر بر مواز آبر به مودا برعکرمه بر حصنه بر میسر عیلا ل

FIGURE 5.21 E: MS cod. ar. 437, fol. 3ª (Ibn Duqmāq, *Nazm al-jumān fī ṭabaqāt aṣḥāb imām-inā l-Nuʻmān*, unknown copyist)

MUNICH, BAYERISCHE STAATSBIBLIOTHEK

عزل فردة عزله وسي يصواله عند الالبن حاله عليه وسلح مال اللع - اغفه لعبيدا بن عامره وما لا بواخوا الحافظ الوعامرا لا شفين عبدات برها بن ومنا وبروه ب وانبال عبيد نروه ب المعامر هجهة مزا بن الدعليوسط دوم عند نع الحريث (كاردُ والانتعماد و وهزا عنه عبيد برخصا ركب

FIGURE 5.22 F: MS Fazıl Ahmed Paşa 242, fol. 39<sup>b</sup> (Ibn Manda, *al-Tārīkh al-mustakhraj min kutub al-nās*, unknown copyist, seventh/thirteenth c.)

ISTANBUL, KÖPRÜLÜ YAZMA ESER KÜTÜPHANESI

بنوقى روايه الغرب فائى اعرف رحلاكان بصلى فى البوم مايه ركعة ما افسده الا دوايته غرب الحدث ولنداخذ ت منه كماب زريد الإيامي وانطلقت بدالي زريد فها غيرهلي وله حرفا الاانه كان بقول في احادث مسمعها من

FIGURE 5.23 G: IM (MS 575), fol.  $21^a$  (entirely in al-Maqrīzī's hand) ISTANBUL, MURAT MOLLA KÜTÜPHANESI

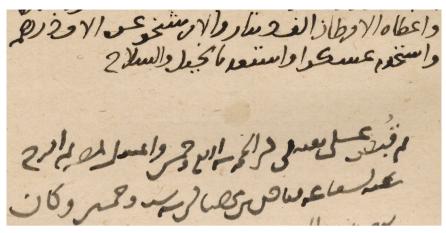


FIGURE 5.24 H: L4 (Ms Or. 14533), fol. 348a (seven lines in al-Maqrīzī's hand (top), ten lines in Ibn Ḥajar's hand (bottom))

LEIDEN, UNIVERSITEIT LEIDEN, UNIVERSITEITSBIBLIOTHEEK

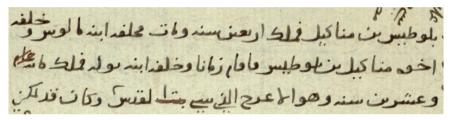


FIGURE 5.25 I: Lg (MS 2232), fol. 48<sup>b</sup> (entirely in al-Maqrīzī's hand)
LIÈGE, LIÈGE UNIVERSITÉ, BIBLIOTHÈQUE D'ARCHITECTURE, LETTRES,
PHILOSOPHIE, HISTOIRE ET ARTS

### 5 Conclusion

The starting point of this study was based on the need 'to show' how al-Maqrīzī's handwriting can be identified and describe how 'to give the feeling' that the same hand is at play in several manuscripts considered his holographs or authorial manuscripts. The global analysis applied to a wide corpus covering an almost uninterrupted fifty years of activity and some 5,000 leaves, yielded tangible results that must not, however, be read in a linear way, rather, we must assess them according to the nature of the written text, the circumstances that led to its writing, and al-Maqrīzī's age when he penned it. 196 Some

As Jażdżewski emphasized, though it is paradoxical, that "a writer is free to use some personal 'hands' and he should not be identified with his 'hand.'" See Jażdżewski, Identifizierungsprobleme 326.

general characteristics could be identified, both in codicological and paleographical terms. Other features relate to some categories of texts only. All in all, for the first time, this study offers a fact-based detailed analysis of a scholar's handwriting over time. The idiosyncrasies I have outlined will prove helpful to identify al-Magrīzī's hand in still unknown manuscripts that have yet to be discovered in libraries around the world (three volumes were located during the last two decades). Hopefully, the global approach applied in this specific case will also offer key elements for further analyses of other scholars' hands. While the expert's 'eye' remains crucial for the identification of a given hand, in the near future, Artificial Intelligence (AI) will certainly contribute to the analysis of scholars' hands in the frame of the digital humanities. Though at present the programs developed do not fully satisfy the paleographer's desires, I am convinced that these programs, once they will have been refined, will provide us with an accurate tool. At the same time, we hope that their progress will not stymie the development of paleographical studies, particularly the informal handwritings of scholars, which have so far drawn little attention. To improve the analysis and knowledge of these handwritings, paleographers and computer programmers will have to establish a framework of mutual cooperation.

TABLE 5.14 Comparative table of letters alif-sīn

	Ł	3	3	3	\$	<b>١</b>	3	3
3	1	1	11	1	<b>{</b> }	11	11	11
3	3	1/	18	3	3/	}	3	1
	ð	3	3	3	3	ን	3	4
	4	5	7	17	1	11	72	12
<b>n</b>	7	1)	`	17	`	٦	1	٦
	4	11	7	٦	٦	٦	٧	٦
1	1	1	9	2	79	44	~~	^
	り	γ	W	W	N	W	2	W
	К	ч	И	4	M	٨	V	M
Ŋ	4	1	910	10	10	۵	۸۸	٨
,	N	N	N	N	O	2	O	2
	j	1	1	1	J	1	1	1
	1	4	4	4	4	1	4	1
)	1	-	1	3	•	`	`	•
	)	1	1	)	}	)	)	)
_	J	7	)	7	7	7	7	7
_	-	_	_	-	~	-	-	_
Age		28	bet. 44–50	bet. 49–57	aft. 50	bet. 51–7	56	63
MS		M	ITZ	15	Lg*	IX	Du	Lg

Table 5.14 Comparative table of letters alif- $s\bar{m}$  (cont.)

	3	3	3	3	5	3
3	1	11	1	1	3/	11
, J	3	3	}	ł	1	1
	3	3	٦	}	}	7
	۲,	1	10	`	1	`
	7	-	)	`	1	/
	4	7	٦	44	44	•
"	1	1	70	00	00	6
	ผ	7	N	N	W	7
) N	۲	5	И	W	N	W
	4	٥	10	10	Ą	70
	Ŋ		N	7	N	2
	j	7	1	1	1	,
)	1	7	1	4	4	•
,	ז	•	•	`	`	`
	)	)	1	)	1	7
_	J	7	7	7	)	7
	_	-	1	1	_	_
Age		aft. 63	aft. 63	bet. 64-7	7.1	76-7
MS	-	Al	An	IS	L5	IA

Table 5.15 Comparative table of letters  $\dot{s}\bar{a}d$ - $q\bar{a}f$ 

	ر.	<b>5</b>	3	3	9	3	<b>5</b>	Ċ	•
, <b>9</b>	, <b>2</b>	2	2	)	3	2	2	2	7
	.નુ	ĭ	9	1	1	1	1	4	9
	.ન	4	44	4	٩	٩	લ	4	4
.3	· <b>9</b>	•	9	9	•	•	•	•	9
	ر.	3	7	9	7	٦	1	٦	9
	ų.	eU	Ø	N	ها	N	4	4	N
ا س	4	<b>ને મે</b> લ	<b>8</b>	बच	٩	4 4	•	d, n	ol M
	4	4	ų	ч	ч	ч	ч	٩	ч
	ى س	2	W	N	S	ع	~	7	2
	-4	4	7	4	4	4	d	7	7
4	4	-4	9	-9	<b>-4</b>	4	9	4	4
	4	4-0	A	9		7	9	9	4
	4	3	4	Š	4	Z	3	4	3
8	4	9	d	4	4	þ	d	4	Ø
2	3	<b>Q</b> Q	9	0	Q	0	0	9	3
	8	3	9	9	8	9	3	3	9
Age		28	bet. 44–50	bet. 49–57	aft. 50	bet. 51–7	56	63	aft. 63
MS		MI	1.12	G	Lg*	IY	Du	Lg	ΑΙ

Table 5.15 Comparative table of letters  $\dot{s}\bar{a}d$ - $q\bar{a}f$  (cont.)

	.4	3	2	5	5
.9	; <b>9</b>	)	7	2	2
	.નુ	1	1	7	1
.၅	٠4	4	4	¥	4
,	۰۹	•	2	٩	•
	ر.	1	3	•	~
	2	N	2	d)	8
ا ا	4	DI DI	4	4 8	* 4
8	4	ų.	ч	y	Ľ
	م	3	3	3	3
	4	9	4	4	4
4	-4	9	4	4	4
	4	P	9	9	9
	4	3	3	3	3
3	4	4	9	\$	0
, J	ş	Q	0	9	0
	8	9	9	3	9
Age		aft. 63	bet. 64-7	1.2	2-92
MS		An	SI	L5	IA

TABLE 5.16 Comparative table of letters kāf-nūn

	٠.5	5	2	)	j	)	2
	·ɔ	)	7	2	2	)	2
	٤	٩٠	7	4 e	25	٧	77
	4	40	+	ł	ł	١	1
	3	7	4	3	•	•	•
	٩	?~	•	-	C	L	•
	ょ	7	7	7	7	٦	7
	4	~	~	7	7	~	~
٦	7	-	~	7	_	-	_
	っ	٦	7	7	7	٦	$\neg$
	ন	14	٦	47	7	4	7
7	ч	51	n	NE	H	ルト	un'
	\ <sub>1</sub>	11	12	112	4	<i>U</i> ~	27
	ন	7	٦	7	5	V	22
Age		28	bet. 44-50	bet. 49–57	aft. 50	bet. 51–7	56
MS		IM	IT2	IJ	$^{\mathrm{Lg}^{*}}$	IY	Du

Table 5.16 Comparative table of letters  $k\bar{a}f$ - $n\bar{u}n$  (cont.)

	٠.5	ኃ	5	5	)	)	>
	·ɔ	כ	)	)	2	)	>
	٤	92	15	4	7.4	10	7.7
	4	•	4	4	1	ч	ŧ
	3	1	•	1	1	1	*
	•	•	•	1	•	•	•
	ょ	7	and .	7	7	7	7
	4	-	7	~	7	7	7
7	7	_		1	~	`	_
	2	7	~	7	7	7	7
	7	۲	44	۲	7'0	4 7	7
7	ч	М	22	J	<b>4</b> ~	4/	4/
	<b>\</b>	h	27	27	4 10	2/	V
	ন	J	1/	7	4	8	1
Age		63	aft. 63	aft. 63	bet. 64-7	71	2-92
MS		Lg	A	An	SI	L5	IA

Table 5.17 Comparative table of letters ha²-ya² and of some ligatures in specific combinations

قال		37	3	9		70	90
5		ð	3	9	9	ع	2
2		すす	7	7	8	7	3
۰		<b>D</b> 4	24	27	27	٦	27
.5		)	5	)	1	\	
æ		فسم	3	3	Z	ć	<b>5</b>
>	メ	N M	K	ネガ	×	スな	X
	7	X	KY	44	XX	イヤ	イイ
<i>s</i> .	5	PCG	7	21	7)	21	71
J.	ઝ	5	17	1	14	1	51
	٩	ġ		4	•	1	•
,	ع)	220	99	~	٦	•	6
	4	4	<	<b>ર</b>	•	•	₹
	*	ф	<b>حم</b>	8	~	<b>&gt;</b>	*
	4	Ø	₹8	Q	रष	в	*
	•	0 10	0	0	0	•	0
Age		28	bet. 44–50	bet. 49–57	aft. 50	bet. 51–7	56
MS		IM	IT2	J	$^{\mathrm{Lg}_{*}}$	IZ	Du

Table 5.17 Comparative table of letters  $h\vec{a}$ - $y\vec{a}$  and of some ligatures in specific combinations (cont.)

ij		7	76	9	76	3	76
3		7	9	9		2	ż
3		7	٥	3	3	3	
٠٠٠٠.		71	2	7~	21	71	74
٠5:		7	)	)	)	)	\
4		3	В	ኅ	<b>19</b>	4	$\mathcal{L}$
7	メ	スズ	$\pi$	スド	К	X	×
	7	ント	X N	イベ	ッソ	٦	λ
<i>S</i> :	5	1	75	21	(د	7)	21
3,	Ŋ	1	1	1	5	21	~
	٩	4		•	۴	4	•
9	و	٦		•	•	٦	1
	Ą	<b>≺</b>	•	₹	•	ŧ	•
•	4	>	*	<b>+ 6</b>	>	44	50
	4	в	8	B	0	Ø	0
	•	9	0	0	0	٥	٩
Age		63	aft. 63	aft. 63	bet. 64–7	71	2-92
MS		Lg	Al	An	IS	L5	IA

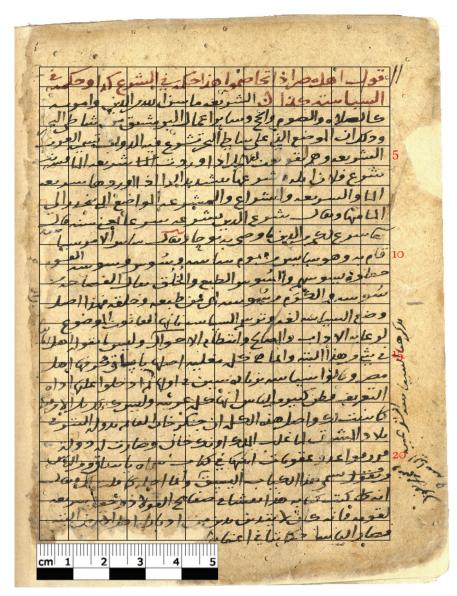


Figure 5.26  $\,$  ms Al (ms 2125 dāl Tārīkh), fol. 4  $^{\rm b}$  Alexandria, bibliotheca Alexandrina

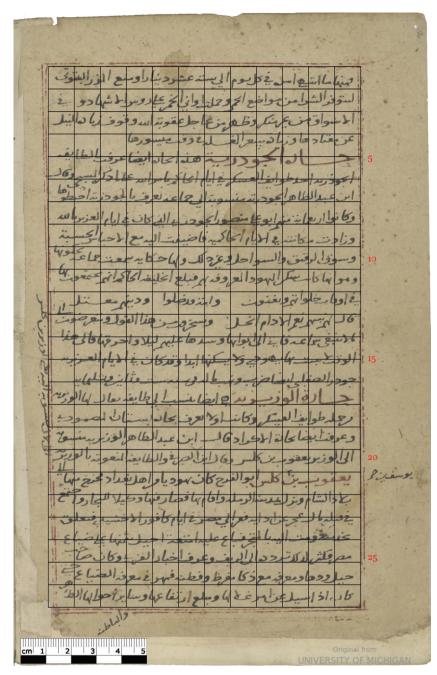


Figure 5.27  $${\rm ms}\,{\rm An}\,{\rm (ms\,Isl.}\,605),\,{\rm p.}\,8$$  ann arbor, university of michigan, special collections library

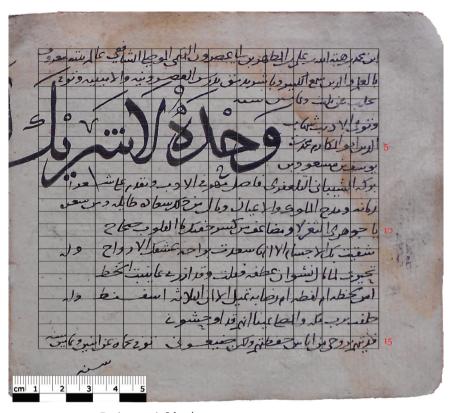
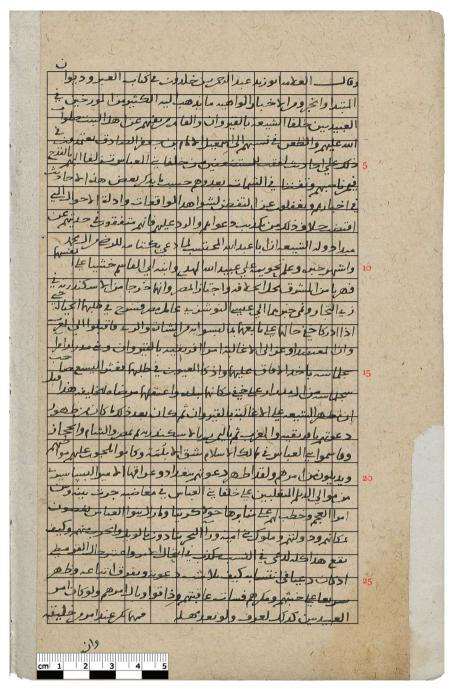


Figure 5.28  $\,$  ms Du (ms 1790), fol. 37  $^{\rm b}$   $\,$  dushanbe, kitobhona-i milli-i todjikiston



ms G1 (ms Ar. 1652), fol.  $10^{\rm b}$ FIGURE 5.29 GOTHA, FORSCHUNGS- UND LANDESBIBLIOTHEK

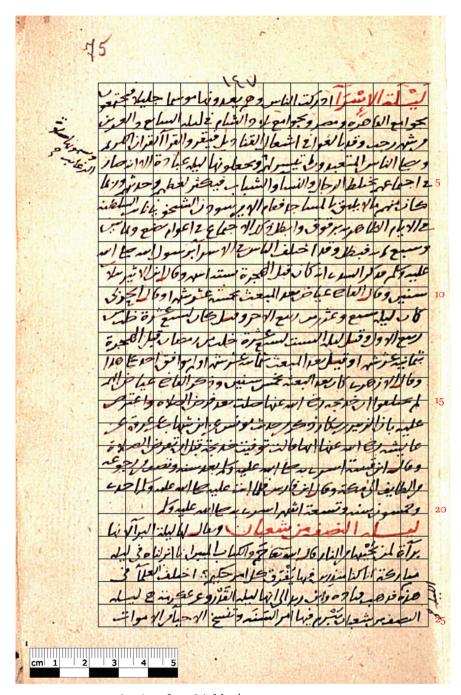
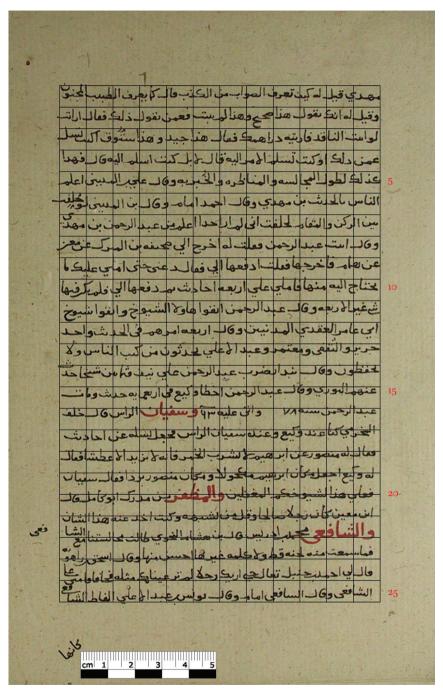


figure 5.30 ms ia (ms Ayasofya 3362), fol. 74<sup>b</sup> istanbul, süleymaniye kütüphanesi



MS IM (MS 575), fol. 15<sup>b</sup> FIGURE 5.31 ISTANBUL, MURAT MOLLA KÜTÜPHANESI

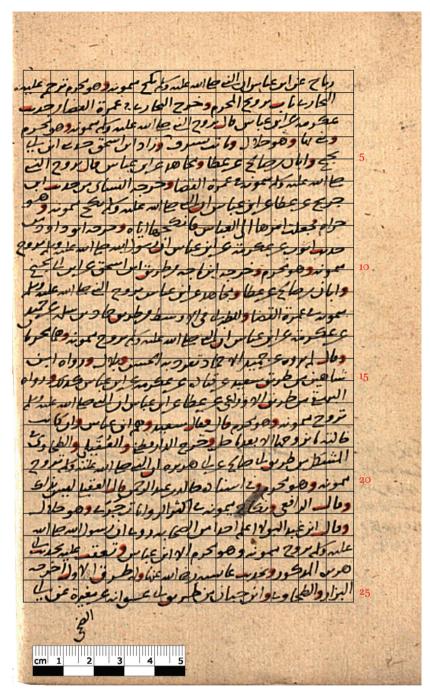


FIGURE 5.32 MS IS (MS Şehit Ali Paşa 1847), fol. 12<sup>b</sup> ISTANBUL, SÜLEYMANIYE KÜTÜPHANESI



MS IT2 (MS Emanet Hazinesi 1405), fol. 16b FIGURE 5.33 ISTANBUL, TSMK

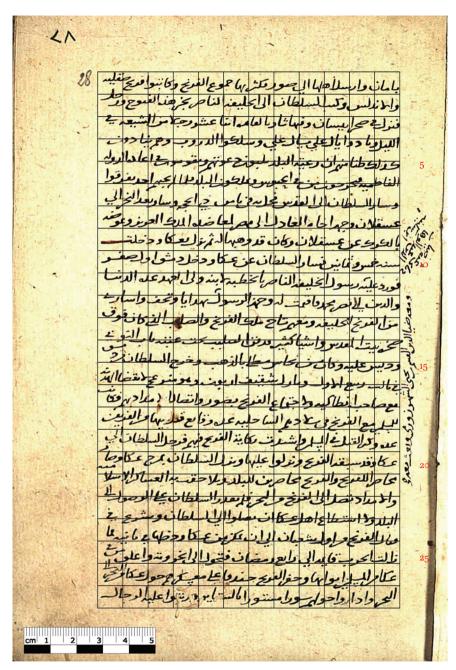
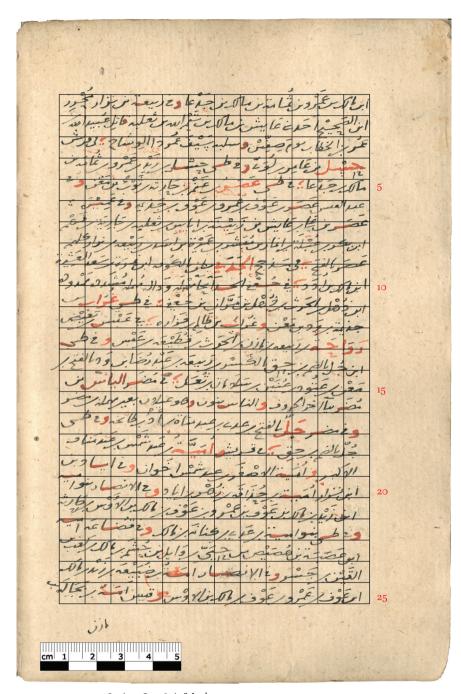


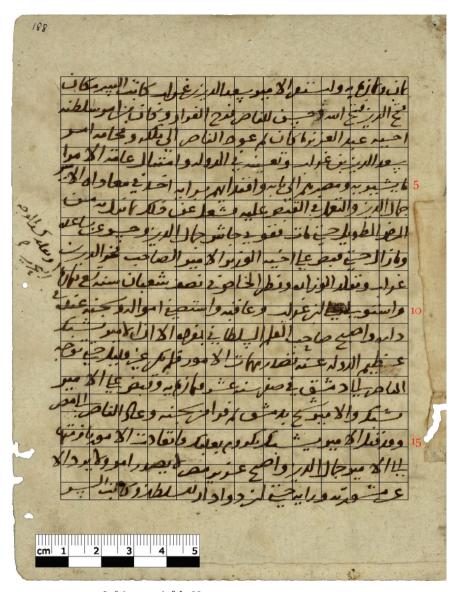
FIGURE 5.34 MS IY (MS Yeni Cami 887), fol.  $28^{\rm a}$  ISTANBUL, SÜLEYMANIYE KÜTÜPHANESI



MS L5 (MS Or. 560), fol. 9b FIGURE 5.35 LEIDEN, UNIVERSITEIT LEIDEN, UNIVERSITEITSBIBLIOTHEEK



FIGURE 5.36 MS Lg (MS 2232), fol. 131 $^{\rm a}$  Liège, Liège université, bibliothèque d'architecture, lettres, philosophie, histoire et arts



MS Lg\* (MS 2232), fol. 188a FIGURE 5.37 LIÈGE, LIÈGE UNIVERSITÉ, BIBLIOTHÈQUE D'ARCHITECTURE, LETTRES, PHILOSOPHIE, HISTOIRE ET ARTS

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# Appendix 1: List of al-Maqrīzī's holograph, autograph, and authorial manuscripts

Al Alexandria, Bibliotheca Alexandrina, MS 2125 dāl Tārīkh

52 fols., 155×120 (120×95), mostly 20 lines.

A notebook gathering summaries from a variety of sources as well as the first sketches of some of al-Maqr $\bar{z}z$ 's writings. One of the first sketches can be dated to shortly after 831/1427-8 because it is entirely based on a source that al-Maqr $\bar{z}z$  consulted that year.  $^{197}$ 

Ann Arbor, University of Michigan, Special Collections Library, Ms Isl. 605 261 fols., 245×165 (200×115), 27 lines.

The text corresponds to the second, and final, version of the third volume of *al-Mawā'iz wa-l-i'tibār fī dhikr al-khiṭaṭ wa-l-āthār*. The text can be dated to after 831/1427–8 because it includes the first version of a section found in Al which was based on a source al-Magrīzī consulted that year.<sup>198</sup>

C Calcutta, The Asiatic Society, MS I 774

131 fols., 184×140 (145×100), 21 l.

The manuscript is composed of three summaries: *Mukhtaṣar Kitāb Qiyām al-layl*, *Mukhtaṣar Kitāb Qiyām Ramaḍān*, *Mukhtaṣar Kitāb al-Witr*. The three original texts were authored by Muḥammad b. Naṣr al-Marwazī (d. 294/906). Al-Maqrīzī indicates in the colophon that he completed his summaries on Thursday 21 Jumādā II 807/25 December 1404.

Da Damascus, Maktabat al-Asad, MS 4805 'āmm

80 fols., 150×120 (125×90), 17 and 20 lines.

A notebook composed of the first version of one of al-Maqrīzī's opuscules and various other notes.

Du Dushanbe, Kitobhona-i milli-i Todjikiston, MS 1790

179 fols., 140×162 (105×125), 14 lines.

The summary al-Maqrīzī made from Ibn Ḥabīb al-Ḥalabī's (d. 779/1377)  $Durrat al-asl\bar{a}k f\bar{i} dawlat al-Atr\bar{a}k$ . The colophon is dated Monday 20 Rabīʻ I 824/25 March 1421.

G1 Gotha, Forschungs- und Landesbibliothek, MS Ar. 1652

58 fols., 245×160 (200×115), 27 lines.

The text corresponds to the beginning of the fair copy of *Itti'āz al-ḥunafā' bi-akhbār al-khulafā'* (the end is missing). This copy can be dated to before the year

<sup>197</sup> See Bauden, Maqriziana XII 70.

<sup>198</sup> See Gardiner and Bauden, A recently discovered holograph 127; Bauden, Maqriziana XII 70.

824/1421, when he consulted a source which he mentions in the margin, <sup>199</sup> and after 816/1413–4, when al-Maqrīzī completed the first version of *al-Khiṭaṭ*.

G2 Gotha, Forschungs- und Landesbibliothek, MS Ar. 1771

185 fols., 245×160 (195×115), 27 lines.

The manuscript contains the beginning of the first volume of the fair copy of *Durar al-'uqūd al-farīda fī tarājim al-a'yān al-mufīda* (the end of the volume is missing). Most of the manuscript predates the year 839/1435, when it was consulted by a scholar who left a consultation note on the title page.

IA Istanbul, Süleymaniye Kütüphanesi, MS Aya Sofya 3362

245 fols., 233×152 (180×110), 25 lines.

The manuscript contains the first volume of the fair copy of *al-Khabar* 'an *al-bashar*. In a passage, al-Maqrīzī discusses an event that he describes as still taking place at the time of the copy, which he gives as the year 844/1440–1.

1F1 Istanbul, Süleymaniye Kütüphanesi, MS Fatih 4338

254 fols., 235×155 (180×110), 25 lines.

The third volume of the fair copy of *al-Khabar 'an al-bashar*. The colophon indicates that al-Maqrīzī completed the copy on Thursday 25 Dhū l-Ḥijja 844/17 May 1441.

IF2 Istanbul, Süleymaniye Kütüphanesi, мs Fatih 4339

163 fols., 235×155 (180×110), 25 lines.

The fourth volume of the fair copy of *al-Khabar 'an al-bashar*. Given the date of MS IF1, this volume and the subsequent ones (IF3, IF4) can be dated between the end of 844/May 1441 and al-Maqrīzī's death in Ramaḍān 845/January 1442.

1F3 Istanbul, Süleymaniye Kütüphanesi, MS Fatih 4340

265 fols., 238×155 (180×110), 25 lines.

The fifth volume of the fair copy of *al-Khabar 'an al-bashar*. For the dating, see MS IF2.

1F4 Istanbul, Süleymaniye Kütüphanesi, MS Fatih 4341

276 fols., 235×155 (180×110), 25 lines.

The sixth volume of the fair copy of *al-Khabar 'an al-bashar*. For the dating, see MS IF2.

IM Istanbul, Murat Molla Kütüphanesi, MS 575

215 fols., 255×169 (190×120), 25 lines

The manuscript contains a summary of Ibn 'Adī's (d. 365/976) *al-Kāmil fī ḍu'afā' al-rijāl* which al-Maqrīzī completed on 1 Muḥarram 795/17 November 1392.

Is Istanbul, Süleymaniye Kütüphanesi, MS Şehit Ali Paşa 1847 211 fols., 237×155 (180×110), 25 lines.

<sup>199</sup> See Magriziana XII 70.

The manuscript holds the fourth volume of the fair copy of  $Imt\bar{a}'$  al- $asm\bar{a}'$ . The copy can be dated between 832/1428, when al-Maqrīzī started the fair copy, and 834/1431, when this volume was read aloud to al-Maqrīzī during his stay in Mecca (as several marginal notes confirm). $^{200}$ 

IT1 Istanbul, тSMK, MS Hazine 1472

179 fols., 181×144 (140×105), 20 lines.

This is the second volume of the first version (draft) of *al-Mawāʿiz wa-l-iʿtibār fī dhikr al-khiṭaṭ wa-l-āthār*. This copy can be dated after 811/1408-9, if one accepts that al-Maqrīzī started to work on this subject once he acquired al-Awḥadī's (d. 811/1408-9) work, and 816/1416, given that additions were made later, on the years 817-8/1414-6.

IT2 Istanbul, TSMK, MS Emanet Hazinesi 1405

182 fols., 179×141 (135×100), 20 lines.

This manuscript contains the third volume of the first version (draft) of *al-Mawā'iz wa-l-i'tibār fī dhikr al-khiṭaṭ wa-l-āthār*. Its dating can be narrowed on the basis of the evidence provided by the preceding manuscript (MS IT1).

ıy Istanbul, Süleymaniye Kütüphanesi, мs Yeni Cami 887

257 fols., 250×166 (195×115), 27 lines.

This is the first volume of the fair copy of *al-Sulūk li-ma'rifat duwal al-mulūk*. This volume can be dated after 818/1415-6 on the basis of one of the sources used by al-Maqrīzī (Ibn al-Furāt) whose work he accessed that year, and before 824/1421 on the basis of another source which he consulted that year and from which he added biographies (on slips of paper) to this manuscript.  $^{202}$ 

L1 Leiden, Universiteit Leiden, Universiteitsbibliotheek, MS Or. 1366a 226 fols., 255×160 (195×110), 27 lines.

This manuscript contains the fair copy of what must have been the first volume of *al-Tārīkh al-kabīr al-muqaffā*.

L2 Leiden, Universiteit Leiden, Universiteitsbibliotheek, Ms Or. 1366c 287 fols., 238×159 (193×110), 27 lines.

The manuscript corresponds to the fair copy of what must have been the third volume of *al-Tārīkh al-kabīr al-muqaffā*.

L3 Leiden, Universiteit Leiden, Universiteitsbibliotheek, Ms Or. 3075 252 fols., 239×160 (195×110), 27 lines.

The manuscript contains the fair copy of what must have been the second volume of *al-Tārīkh al-kabīr al-muqaffā*.

<sup>200</sup> See Bauden, Al-Maqrīzī's collection.

<sup>201</sup> See Bauden, Magriziana II 205–12.

<sup>202</sup> See Bauden, Maqriziana x/1.

L4 Leiden, Universiteit Leiden, Universiteitsbibliotheek, MS Or. 14533 550 fols.,  $235\times159$  (188×110), 27 lines.

This manuscript corresponds to the fair copy of what must have been the fourth and possibly fifth volume of *al-Tārīkh al-kabīr al-muqaffā*.

L5 Leiden, Universiteit Leiden, Universiteitsbibliotheek, Ms Or. 560 214 fols., 239×154 (180×110), 25 lines.

This authorial manuscript is a collection of opuscules, the majority of which were composed by al-Maqrīzī. Most of the texts are in someone else's hand (probably a scribe he hired for this purpose), while only a few are in al-Maqrīzī's handwriting. The texts copied by the scribe were collated by al-Maqrīzī between 841 and  $842/1438.^{203}$ 

Lg Liège, Liège Université, Bibliothèque d'Architecture, Lettres, Philosophie, Histoire et Arts, MS 2232

209 fols.,  $165 \times 136$  (140 × 100), mostly 21 lines (in some cases 20, 18, 17 lines).

A notebook that includes several summaries from a wide variety of sources. One of these sources (Ibn Faḍl Allāh al-'Umarī's  $Mas\bar{a}lik\ al-abṣ\bar{a}r$ ) was consulted in 831/1427–8. This enables us to date several parts of the notebook accordingly. <sup>204</sup>

P Paris, BnF, Ms Arabe 2144

260 fols., 250×160 (190×110), 27 lines.

The manuscript contains the fair copy of what must have been one of the last volumes of *al-Tārīkh al-kabīr al-muqaffā*.

<sup>203</sup> See Bauden, Al-Magrīzī's collection.

<sup>204</sup> See Bauden, Magriziana VII.