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"Kakubha Rāginī", watercolour, gouache, gold and ink on paper. Deccan, second half of the 18th century. Album (*Muraqqa'*) X 3 in the Fabergé collection at the St. Petersburg Branch of the Institute of Oriental Studies, fol. 20b, 7.6 × 11.5 cm.

Back cover:

Plate 1. "Gujarī Rāginī", watercolour, gouache, gold and ink on paper. Deccan, second half of the 18th century. Same Album, fol. 21a, 6.5 × 11.5 cm.

Plate 2. "Gunkālī (Gunkārī) Rāginī", watercolour, gouache, gold and ink on paper. Mughāl, second half of the 16th century. Same Album, fol. 24b, 11.5 × 12 cm.

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Plate 4. "Rāginī" (unidentified), watercolour, gouache and gold on paper. Deccan, second half of the 18th century. Same Album, fol. 27a, 11.5 × 17.0 cm.

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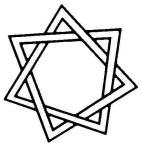

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ORIENTAL MANUSCRIPTS AND NEW INFORMATION TECHNOLOGIES

Hala Kaileh

THE CREATION OF THE ARABIC MANUSCRIPTS METADATA BASE

One of the major difficulties which confront those who study Arabic manuscripts lies in the determination of necessary metadata for the digitalized manuscripts' description. The metadata is considered to be the key search element by which the user is able to make search of manuscripts or their different fragments. The present article aims at the determination of a set of data applicable to Arabic manuscripts: it directly addresses manuscripts' users to facilitate their manuscripts' using and searching, and to define possible needs in this domain.

As a first step in this direction, a questionnaire has been compiled to be distributed among the specialists in Arabic manuscripts at the MELCOM conference in Venice (May, 2000). A number of questionnaire's copies were also distributed at the Bibliothèque nationale de France by the responsible for the Bibliothèque's Oriental Manuscripts Department. Unfortunately, the number of the questionnaires returned was not large and to get more information we had to put the questionnaire on the Internet through the discussion group list — "List-Middle East" [*LIS-MIDDLE-EAST@JISCMAIL.AC.UK*]. As a result of all these attempts, we have received 15 answers which can be considered quite exploitable. In the present article, we shall try to analyse the answers received thanks to the questionnaire in order to present important data the 15 answers contain.

First, we provide here information about our respondents: their nationality, profession, age and sex. Then we shall attempt to analyse the contents of the respondents' answers concerning the investigation of manuscripts from the viewpoint of typology, codicology, palaeography, etc. In the article we also treat the problems and perspectives of information search relating to Arabic manuscripts. Finally, the article deals with the problem of the digitalisation of Arabic manuscripts in the light of their users' expectations in this field.

Table 1*

Respondent	Nationality	Profession	Users' age					Sex	
			20–30	31–40	41–50	51–60	60–	F	M
Q1	Français	Prof. d'université			×			×	×
Q2	Américain	Bibliothécaire			×				×
Q3	Grecque	Maître de conférences (arabisante)			×			×	
Q4	Canadien	Erudit				×			×
Q5	Palestinien	Chercheur, études islamiques	×						×
Q6	Tunisien	Directeur de recherches					×		×
Q7	Belge	Maître de conferences		×					×
Q8	Anglais	Conservateur de bibliothèque		×					×
Q9	Allemande	Bibliothécaire, spécialisée en littérature arabe			×			×	
Q10	Français	Directeur de recherches				×			×
Q11	Marocain	Maître de conferences			×				×
Q12	Français	Chercheur CNRS				×			×
Q13	Italien	Chargé d'enseignement		×					×
Q14	Française	Etudiante	×					×	
Q15	Français	Maître de conférences				×			×

* Q1, Q2, Q3, etc. are used to indicate the respondents. The general numbering was made without any particular order. We also preserve in this *Table* the French variants of nationalities and professions of the respondents as they define themselves.

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The following points can be underlined as presented in *Table 1*:

(i) We have a rather representative list of the respondents' nationalities. Five are French, of whom four are men and one is a woman; the rest are arranged alphabetically as follows: American, Belgian, British, German, Greek, Italian, Moroccan, Palestinian, and a French of Tunisian origin.

(ii) The age of thirteen out of fifteen respondents is between 31 and 60 years, which seems to testify to their rich experience in the field of manuscripts research.

(iii) Given the experience of the respondents as professionals in the domain (researchers, lecturers, librarians, etc.), their answers can serve as a rich source of information to facilitate the task of the determination of the metadata base applicable to Arabic manuscripts.

There is given below the answers of our respondents to the questions included in the questionnaire.

Question: *What is the area of your interests in the study of manuscripts?*

Table 2

Field of interests	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Total
Texts edition	×	×	×	×	×	×	×	×			×	×	×		×	12
Consultation of texts	×	×		×		×	×	×		×			×		×	9
History of collections		×		×	×		×	×		×			×			7
Palaeography		×				×	×	×	×			×				6
Codicology							×	×	×			×	×			5
History of art		×												×		2

As *Table 2* shows, the majority of the respondents (twelve out of fifteen) deal with the *edition of manuscript texts*; nine need *consultation of texts*; seven indicate the *history of manuscript collections*; six — *palaeography*; five — *codicology*; finally, two respondents indicate the *history of art*.

Thus, the edition of manuscripts is the domain which interests almost all the respondents. The publication of different copies of a text greatly enlarges the possibilities of the user to consult the manuscript he examines.

The consultation of a manuscript's contents is also often important. It is interesting that many respondents take interest in the history of manuscript collections, and almost half of the respondents indicate palaeography, and only a bit less codicology. History of art comes last in the scale of interests of our respondents. A more detailed picture of interests is presented in *Table 3*.

Table 3

Area of interests	First priority	Second priority	Third priority	Fourth priority
Frontispieces	Q1, Q6, Q7, Q8, Q13, Q14	Q5,	Q9	—
Illustrations	Q5, Q9	Q8, Q13, Q14	—	—
Text's decoration	—	Q1, Q7, Q9	Q8, Q13, Q14	—
Binding's decoration	—	—	Q1, Q7	Q9, Q14
Additions:				**Respondent number**
Texts consequence in a manuscript				Q3
Text's contents				Q4
Text's edition in its connection with the history of the Holy Land, Palestine, etc.				Q5
History of art in its connection with the history of the manuscript				Q8
Text's scientific contents				Q10
Text's history, history of the volume, production techniques				Q12
Incipit				Q13
Text, images' legends				Q14
Text's contents from the viewpoint of the classical Arab thought				Q15

We can distinguish two categories of answers concerning particular points of manuscripts study. The first category units the answers proposed by the questionnaire; these were classified according to their priority as demonstrated by the respondents. The second category includes the answers containing additional information provided by the respondents.

We notice that *frontispiece* is the most important element among those which interest manuscripts' users. In the second and in the third place come *illustration* and *text*

decoration. The importance of these elements for the users makes us take them into consideration in the future creation of the metadata base. *Binding's decoration* occupies only the fourth position in the list of priorities; this element interests almost one third of the respondents.

The second category includes eight new elements added by the respondents. They can be presented as follows:

(i) Text's contents interests Q3, Q4, Q5 Q10, Q14, and Q15. Five answers display interest in scientific and philosophical information contained in the text, in particular, data on the evolution of the classical Arab thought, and also images' legends. As for Q5, who showed his interest in text's contents, he communicates that information relating to Jerusalem is his sphere of interests.

(ii) History of the text and production techniques is what interests Q12.

(iii) One answer is "history of art" in its connection with the establishment of the manuscript's provenance or date (Q8).

(iv) Incipits interest only Q13.

Question: *What category of Arabic manuscripts are you working on?*

Table 4

MSS category	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Total
Islamic Arabic	×	×		×	×	×	×	×	×	×	×	×	×	×	×	14
Christian Arabic		×	×		×								×			4

Two groups of Arabic manuscripts were named by the respondents: Islamic Arabic and Christian Arabic manuscripts; each group has its own characteristics. Our purpose was to know manuscripts of what category are used most to take this fact into consideration in the process of the creation of the metadata base.

Table 4 shows that 14 out of 15 respondents work on Islamic Arabic manuscripts, while four persons (Q2, Q3, Q5, and Q13), which makes 27 % of the whole respondent group, take interest in the Christian Arabic manuscripts. Q2, Q5 and Q13 indicate both Islamic and Christian manuscripts.

Question: *What Arabic texts are you working on?*

Table 5

Text type	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Total
Qur'ān		×		×		×		×	×							5
Other religious texts	×	×		×			×	×			×		×			7
Science					×			×	×			×	×	×		6
Literature		×	×		×		×	×	×			×	×	×		9

Additions:	Respondent number
Documents	Q 2
Medieval Islamic juridical texts of Andalusia and Maghrib	Q 6
Above-mentioned texts studied in the cataloguing purposes	Q 8
Philosophy	Q10
History	Q11
Grammar	Q12
Islamic Arabic mysticism and philosophy	Q15

From the answers we can conclude that nine respondents work on Arabic *literature* texts. The rest of the answers can be represented as follows:

(i) 7 respondents deal with religious texts other than the Qur'ān, such as *ḥadīth*, *tafsīr*, etc., and with Christian Arabic religious texts.

(ii) Scientific texts, in spite of their abundance, especially in the field of medicine, pharmacy, astronomy, etc., occupy a rather feeble position (only 6 respondents).

(iii) Five respondents take interest in the study of Qur'ānic manuscripts.

In addition to the above-mentioned texts proposed by the questionnaire, we have received the following answers: documents (Q2); medieval Islamic juridical texts of Andalusia and Maghrib (Q6); Islamic Arabic mysticism and philosophy (Q15); history (Q11); philosophy (Q10); texts on the grammar of the Arabic language (Q12).

Question: *What period are you interested in?*

Table 6

Period	Respondent number	Subject and period	Respondent number
4th — 10th centuries	Q11	Codicology, 9th — 16th centuries	Q12
6th — 7th centuries	Q6		
7th — 15th centuries	Q1, Q8		
8th — 16th centuries (700—1500)	Q9	Palaeography (all periods)	Q12
10th — 20th centuries	Q7		
12th — 14th centuries	Q6	Islamic and pre-Islamic Jerusalem	Q5
12th — 15th centuries	Q15		
Islamic period	Q4	Grammatical texts, 9th — 16th centuries	Q12
All the periods	Q14		

As is seen from *Table 6*, in some answers not only dates by also the subject of interest in its connection with a certain period were indicated. Q11, Q6, Q1, Q8, Q9, Q7, Q6, Q15 gave the exact period limits, while Q5, Q4, and Q14 indicated a wide period range of their interest. All these do not mention a special field of their interests. Q12 indicates codicology, palaeography, and grammatical texts as his sphere of research but his interest is connected with different historical periods. Though indicating wide limits of the period (Islamic and pre-Islamic period), Q5, in effect, takes interest in all the manuscripts relating to the Islamic and pre-Islamic Jerusalem.

Question: *Is the aim of your research is to make comparison of the following elements?*

Table 7

Comparison object	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Total
Manuscript's different titles	×		×			×	×	×	×	×		×	×		×	10
Name of the author as presented in different manuscripts					×	×	×	×		×	×	×	×		×	9
Colophon in different manuscripts	×			×		×	×	×		×	×	×	×	×	×	11
Manuscripts' copyists	×			×	×	×	×	×				×	×	×	×	10

Additions:	Respondent number
Scripts	Q12
Text's variants	Q4, Q12
Incipits	Q13
Page layout and images	Q10
Identification of the author	Q11

This question in the questionnaire aimed at revealing particular elements of the respondents' interest in the domain of Arabic manuscripts. Eleven respondents' aim is the collating *colophons in different copies* of the same text. This part of manuscripts is extremely important allowing the researcher to track down information concerning the name of the author and / or the name of the copyist, place and date of the manuscript, if indicated. Ten respondents deal with the collating of *the names of copyists* and the form in which the name appears in different manuscripts. Nine answers reveal interest in the collating of *the author's name variants*. Ten respondents deal with *the titles* of the same work as they are presented in different manuscripts.

Some answers provide important additional information. Q12 takes interest in examining Arabic scripts. Q12 shares his interest with Q4 in text's variants. Q13 is the only one who investigates incipits, while Q10 deals with page layout and images. Finally, Q11 shows authorship as his field of research.

Question: *Which of the following codicological elements are the most interesting for you?*

Table 8

Codicological element	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Total
Quires	×		×		×	×	×	×				×	×			8
Type of support	×				×	×		×	×			×	×			7
Pagination type						×	×					×				3
Binding technique						×	×		×					×	×	5
Pages layout	×					×	×	×	×	×		×	×	×		9
Additions:													**Respondent number**			
Notes on the margins													Q10			
Paper dating													Q15			

The answers show that what interests the respondents most is *pages layout* (9), that is, page ruling, number of lines per page, divisions within the text (between chapters, sub-chapters, paragraphs, etc.). Eight take interest in the *composition of quires* (five, ten, etc. sheets). Seven answers reveal interest in *type of support* (paper, parchment), five — in *binding technique*. And finally, three respondents deal with *pagination of manuscripts*, especially custodes.

Two additional elements were indicated by Q10 and Q15: *notes on the margins* and *paper dating*. *Table 9* presents information received from the respondents about what elements of *pages layout* interest them most.

Table 9

Page layout element	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Total
Number of lines per page	×			×	×	×	×	×					×		×	8
Page ruling	×			×		×	×	×	×			×	×	×		9
Text structure	×			×	×	×	×	×		×		×	×			9

Text structure and *page ruling* are equally important for nine of our respondents. The second position in importance is occupied by the *number of lines per page*.

Question: *What elements of your research are most important from the viewpoint of a manuscript's history?*

Table 10

Manuscript's history elements	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Total
Collection	×	×	×	×	×	×	×	×	×				×	×		11
Owner's name	×	×		×	×			×					×	×	×	8
Seals	×	×		×		×	×	×						×	×	8
Additions:													**Respondent number**			
Manuscript's provenance													Q13			
Colophon													Q14			
Dedication													Q14			
Various indications aiding manuscript's dating													Q15			
Manuscript's importance in the scientific or philosophical context													Q10			
Manuscript's relation to the pre-Islamic history of Jerusalem													Q5			

As *Table 10* demonstrates, *owners' names* and *seals* are points of interest for eight respondents respectively, while what interests the majority of the respondents (11) is *collections* (the names of the collectors to be exact).

The points of interest added by the respondents are:

(i) Q13 points to the importance of the *place* where a manuscript was executed (Andalusia, Middle East, etc.).

(ii) Q14, who enters the large group of respondents naming *collection* as the most important element of his research of manuscripts' history, adds to this colophons which enable the researcher to trace down the history of a given manuscript. He also indicates the importance of *dedications* for this aim.

(iii) Q10 considers important the study of manuscripts in the scientific or philosophical context.

(iv) Q15 is most general in his answer; he mentions all *indications aiding manuscript's dating*.

Question: *Which of the following palaeographic elements are the most important for you?*

Table 11

Palaeography element	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Total
Morphology	×		×		×	×		×				×				6
Style					×	×	×	×				×			×	6
Calligraphy			×			×		×	×		×				×	6
Additions:													**Respondent number**			
All of the elements which are helpful to dating and localising manuscript													Q10			

Almost half of the answers reflect interest in palaeography in general. The palaeographic elements such as *morphology*, *style*, and *calligraphy* appear to be equally interesting for our respondents. Despite the richness of types and beauty of handwritings in Arabic manuscripts, no special interest was shown to calligraphy. Finally, Q10 is the only one who reveals another point of interest — manuscripts' provenance.

Information searching

It is important to point to the difficulties connected with information searching while using manuscripts. We shall try here to focus on the points, indicated by respondents, connected with information searching and on the problems of manuscripts digitalisation.

Question: *How do you search information in manuscripts?*

Table 12

Search tools	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Total
Table of contents	×	×		×	×			×		×			×			7
Chapters and sub-chapters' titles	×	×	×		×	×		×		×		×	×			9
Leafing through manuscript	×	×		×		×	×	×	×	×	×	×	×	×	×	13
Additions:													**Respondent number**			
Catalogues													Q4			
Major bibliographical sources (e.g. Brockelman, etc.)													Q8			
Biographical and bibliographical information													Q15			

As is seen from *Table 12*, most of the respondents (13) make search of necessary information simply by leafing through manuscripts, which we consider the least effective and even annoying way of searching. Besides, it takes a lot of time, not to mention that leafing through a fragile manuscript is not an easy thing to do and it can damage the manuscript. Nevertheless, this method is used most frequently, especially when the table of contents is lacking in a manuscript.

Nine respondents' answers reveal that they find the information they need by tracking down the titles of chapters and sub-chapters. The number of users of the tables of contents is seven. Unfortunately, Arabic manuscripts contain tables of contents but rarely, which makes information searching a rather difficult task. In most cases, the researchers are compelled to leaf through the manuscript so as to find necessary information.

It is interesting that three additional search means were proposed: catalogues (Q4); bibliographical sources, such as Brockelman, Sezgin, etc. (Q8); biographical and bibliographical data (Q15).

Question: *Do you find the information you are looking for easily?*

Table 13

General answer	Respondents' particular answers	Respondent number	Total
YES	Not always	Q1, Q4	2
	Always	Q6, Q7, Q11, Q13, Q14, Q15	6
	Generally easy, but it depends	Q8	1
NO	Always not easy	Q3, Q5, Q9	3
	Not easy, but it depends	Q10	1

Six respondents declare that they always find the information they need easily. Information searching is also an easy process for Q1 and Q4, but it is not always the case. Q8 says that, in his view, this depends on the experience of the researcher. Furthermore, four respondents find the process of information searching a difficult task (Q3, Q5, Q9, Q10), but in the case of Q10 it depends.

Question: ***What kind of problems do you encounter when searching information in manuscripts?***

The answers to the question were as follows:

(i) Insufficiency of knowledge (Q3).

(ii) Various difficulties: lack of titles (*acephalous* manuscripts), folios disarray, etc. (Q10).

(iii) Lack of tables of contents and of indices in most of Arabic manuscripts.

(iv) Several factors which make information searching difficult: inaccessibility of a great deal of manuscripts scattered all over the world; lack of necessary copies on the same subject to be collated; bad preservation of many manuscripts (Q5). Q5 also adds that there should be more active interchange of manuscripts on international level and high-tech equipment is needed to safeguard manuscripts.

Manuscripts digitalisation

Question: ***What do you think of manuscripts digitalisation?***

Twelve out of our fifteen respondents are for Arabic manuscripts digitalisation for the following reasons:

(i) For Q1 and Q6, the digitalisation presents a welcome and interesting initiative.

(ii) Q2 thinks that the digitalisation is a step forward in the process of manuscripts study.

(iii) For Q3, the digitalisation would mean elimination of a significant part of problems relating to the reading and classification of manuscripts, but only "if we succeed in establishing a sample which will gather maximum of cases".

(iv) Q4's answer is also conditional. He thinks that it is a good idea if access and resolution are possible.

(v) From the viewpoint of his experience, and taking into account the character of the corpus of manuscripts he deals with, Q5 finds the idea very good. However, he remarks that we need corresponding experts to carry out manuscripts digitalisation work on a high level.

(vi) For Q7, the digitalisation is a technical problem of access which needs wise employing.

(vii) Q11 and Q7 are unanimous in stating that the digitalisation is a very effective means comparable with revolution, which makes Arabic manuscripts available throughout the world.

(viii) Q9 is the only one who specially mentions the importance of the digitalisation for facilitating his task of using manuscripts.

(ix) For Q11, the digitalisation is a good means of protecting originals by reducing the direct contact with manuscripts.

(x) Q8 shares his views with other respondents in some respects: the digitalisation can provide wider public access to Arabic manuscripts; it can serve as a means of producing excellent surrogates of the originals, particularly when it concerns the illuminated and illustrated manuscripts, let alone unique copies; the digitalisation is a beneficial thing for manuscripts' conservation and preservation, since the readers can study manuscripts without physical contact with them.

(xi) Q10 gives no exact answer, referring to the lack of experience in this field.

Question: ***Do you think that putting manuscripts on the Internet can facilitate the research work?***

Table 14

General answer	Respondents' particular answers	Respondent number	Total
YES	I do not know the answer but I hope it can.	Q1	1
	Yes (without special comments).	Q2, Q3, Q4, Q13, Q14	5
	Yes, but there are researches who already read texts very fast. With the aid of this modern means they will do it faster.	Q6	1
	It will make faster access to essential data and enable the user to consult manuscripts.	Q7	1
	Yes, the remote user will be able to consult manuscripts on-line and to do a great deal of his research work at home before consulting the originals; again, less handling precious manuscripts.	Q8	1
	You can look into a manuscript using your personal computer and have no troubles of getting its copy or making travels from library to library.	Q9	1
	Yes, but is it possible to get access to a great number of manuscripts through digitalisation?	Q10	1
	Yes, if we could thus gather a large collection of manuscripts.	Q11	1
NO	No, though, there is a lot of important information these manuscripts absorb. Putting it on the Internet might endanger the owners and so on. Yet, if this takes place on the international level, it might be fine.	Q5	1

One can notice that the most numerous group of the respondents includes those who are for manuscripts digitalisation and putting them on the Internet, but they do not enter into any details in their answers (Q2, Q3, Q4, Q13, Q14).

The second group is also positive in their attitude towards digitalisation and provides some opinions: Q7 welcomes faster access to essential data and the possibility for a direct consulting manuscripts; Q10 joins Q7's opinion but doubts that putting manuscripts on the Internet can provide access to a great number of manuscripts.

According to the third group (Q8, Q9 and Q11), the digitalisation can facilitate the work of the users by offering them an on-line access to Arabic manuscripts (Q11 notes in particular that it is very important for the researches who live far from big libraries). Really, the on-line access save the researchers from strolling through libraries in search of necessary information; the Internet and personal computers enable them to find easily a manuscript they need. This point is stressed by Q9 in particular. Q8 adds that the digitalisation and putting manuscripts on the Internet contribute to better manuscripts' conservation by reducing direct contact with often very old and fragile Arabic manuscripts.

The answers of the fourth group of the respondents are obviously conditional. Q8 points to the quality of the digitalisation process. Q6 is concerned with the new possibilities of rapid reading texts which the digitalisation provides, while Q15 warns about the necessity of gathering a good number of manuscripts to be digitalised.

One answer stands somehow alone. Q5 is against putting manuscripts on the Internet, which, in his view, is not always good for the owners of manuscripts. Manuscripts are considered as historical witnesses which sometimes can provoke polemics. It is from this viewpoint that Q5 foresees possible dangers which, he says, can be avoided if the project of the digitalisation becomes an international project. The last view still give us the ground to regard Q5 as a conditional supporter of the digitalisation and putting manuscripts on the Internet.

Question: *What are your expectations from an electronic research of manuscripts?*

The answers received can be presented as follows:

(i) Easy information searching (Q1, Q6, Q7). The Internet makes information constantly available. An advance in electronic search can considerably facilitate the research work in general (Q6). Q7 underlines the exhaustiveness and the rapidity of information access.

(ii) The growing possibilities to collate manuscripts (Q15, Q8). The concern of these users is the collation of manuscripts on the same subject and the possibility to make a comparative study.

(iii) Maximum systematisation of information contributing to the process of "globalisation", and the collection of scattered information, which can bring to new conclusions (Q3).

(iv) Identification, understanding and text interpretation: the expectation of Q4 is the possibility to read manuscripts. Q10's expectations are reading texts easily on screen and also to have access to a sort of lexicon to explain the vocabulary, etc.

(v) High quality image: Q2 and Q9 wish to have good quality images of manuscripts, and the possibility of manipulating these images (Q2 in particular).

(vi) Catalogues' correction and their completion (Q2).

(vii) Vision of the whole of a manuscript "to leaf it through" (Q14).

(viii) Q5 believes that the digitalisation and electronic information search can lead to the distortion of the text, so it will make the process of collating manuscripts on the same subject more difficult.

The respondents also propose some additional points of electronic search which they consider to be indispensable in the creation of the metadata base. These additions are reflected in *Table 15*.

Table 15

Additions	Respondent number
Proper names	Q1
Subjects	Q1
Titles	Q7
Chapters	Q7
Codicological data	Q7
Types of illumination	Q8, Q14
Types of illustrations	Q8
Colophons	Q8
Indices by chapters' titles	Q9
Miniatures	Q14
As much information concerning authors as possible	Q15

In addition to what is shown in *Table 15*, one of our respondents, Q5, expresses his desire that electronic information search in the field of Arabic manuscripts should be free of charge.

Question: *Would you like to add some other pertinent elements not mentioned in the questions?*

To this question we received to following answers:

(i) Electronic classification of manuscripts (Q3).

(ii) Scientific use of the contents (Q15).

(iii) Q5 expresses his personal hope that the project of digitalisation will be a suitable means to collect all the manuscripts dealing with Palestine and Jerusalem in particular, and to bring them back to the Holy Land, the answer which seems to stand somehow apart from other views.

Conclusion

The results which we have obtained thanks to the answers of our respondents allow us to start the process of creating the Arabic manuscripts metadata base. What was offered by the respondents can be always improved and complimented with the aid of additional studies or digitalisation projects such as MASTER, BAMBI or DEBORA.

In *Table 16* we summarise all the answers provided by the respondents*.

*Please, compare the approach proposed by E.A. Rezvan at the 4th International Conference and Exhibition on Multi-Lingual Computing (London, 1994). See E. Rezvan, N. Kondybaev, "New tool for analysis of handwritten script", *Manuscripta Orientalia*, II/3 (1996), pp. 48—51 (*Manuscripta Orientalia* editors).

Table 16

No.	Data		
1	Author		
	Copyist		
	Owner's name		
	Collector's name		
2	Title	Manuscript's title	
		Chapters' titles	
		Sub-chapters' titles	
		Manuscript's title as presented in the colophon	
		Incipit	
3	Colophon	Date	
		Place	
4	Period of study	Period	4th — 10th centuries
			6th — 7th centuries
			7th — 15th centuries
			8th — 16th (700—1500)
			10th — 20th centuries
			12th — 14th centuries
			12th — 15th centuries
			Islamic
			All the periods
		Subject and period	Codicology, 9th — 16th centuries
			Palaeography (all periods)
			Text on grammar, 9th — 16th centuries
			Islamic and pre-Islamic Jerusalem
5	Data which help to establish manuscript's date	Owner's name (persons or institutions)	
		Collector's name	
		Seals	
		Place of manuscript's copying	
		Colophons	
		Notes	
		Dedications	
6	Field of interests	Edition of texts	
		Consultation of texts	
		History of collections	
		History of art	
		Palaeography	
		Codicology	
7	MSS category	Islamic Arabic	
		Christian Arabic	

Continuation of Table 16

8	MSS subject	Qur'ān	
		Other religious texts	
		Science	
		Literature	
		Documents	
		Medieval Islamic juridical texts of Andalusia and Maghrib	
		Above-mentioned texts studied in the cataloguing purposes	
		Philosophy	
		History	
		Grammar	
		Islamic Arabic mysticism and philosophy	
9	Codicology	Quires	
		Writing material	
		Pagination type	
		Binding technique	
		Page layout	Number of lines by page
			Page ruling
			Text structure (chapters, sub-chapters, etc.)
		Marginal notes	
		Paper dating	
10	Palaeography	Morphology	
		Style	
		Calligraphy	
		All data helpful to dating and localising manuscripts	
11	Decoration	Frontispieces	
		Illustrations	
		Miniatures	
		Illumination	
		Binding decoration	
12	Additional information	Tables of contents	
		Subjects	
		Indices by chapters' titles	
		Proper names	
		Titles mentioned in manuscripts	
		Information concerning authors	
		Images' legends	
		Texts consequence in manuscripts	