The 2nd COMSt Workshop “The Making of the Oriental Book” proved to be a very successful and stimulating event. Many important topics related to the manuscript production and the codicology of Oriental manuscripts were discussed there. Below I propose the report on the meeting, participation in which was particularly important and beneficial for me.

1. Making and structure of quires.

Marilena Maniaci made a general introduction to the terminology and the problematic and then presented the overview of quire structure in medieval Greek and Latin MSS. Quire is a group of bifolia and/or singletons, nested together along their spine folds. At the beginning bifolia were produced by horizontal cutting of a papyrus or parchment roll (papyrus codices were narrower than parchment ones).

The arrangement of bifolia in quires in Greek parchment codices usually corresponds to the Gregory rule (hair side adjoining hair side and flesh side adjoining flesh side). In most cases majuscule codices start with hair side while minuscule codices (from the 9th cent.) tend to start with flesh side (cf. Latin codices starting with hair side and switch to flesh side from the 13th century onwards).

Quire structure of early Greek codices varies from unions (in papyrus codices) to quinions. However quaternions are the most common form of quires in Greek medieval parchment codices (as, for example, in Codex Sinaiticus, Codex Vaticanus, and Codex Marchalianus). The number for quires also varies (the average number of leaves is about 200). In Byzantine tradition it is not uncommon that the end of a text (e.g., a Gospel) corresponds to the end of a quire. Thus the form of book may be either “multitext monoblock” (with uniform structure) or “multitext multiblock” (with varied structure).

Denis Nosnitsin’s talk was focused on the corpus of Ethiopic MSS from the monastery libraries in East Tigray region (more than 1000 items including magic scrolls). This vast and important collection includes Four Gospels MSS (around 50; the oldest – pre-13th century, some MSS date from 14th -15th cent., 16th cent., 18th cent., majority – 19th – 20th cent.); Psalters, Octateuch MSS, Synaxarions, Missals, Funeral Rites, Wedding Rites, Miracles of Mary, etc.

One of the particular features of Ethiopian MSS is the common use of protective quires and end leaves. Normally parchment bifolia for bigger MSS (e.g. the Four Gospels MSS) were cut using templates. For smaller MSS (e.g. Psalters) the leaves cut already were repeatedly folded once or twice. The Gregory rule was occasionally observed in Ethiopian tradition.

Ewa Balicka-Witakowska added some interesting facts concerning Ethiopian manuscript production based on the study of the MSS collections from Maywayni (15th – 19th cent.). She stressed that the production of paper MSS followed the principles of making of parchment MSS. Quires composed of both bifolia and single leaves. Big Ethiopian codices mostly contain bifolia.
Number of folios in the quires: irregular 57% (mostly 8 and 10 folios); regular 43% (mostly 8, rarely 10 folios). One of the peculiarities in Ethiopian tradition are magic scrolls made from one large piece of parchment. Normally, they were meant to be hanging on a wall.

**Alessandro Bausi** has added some facts concerning Ethiopic MSS in Italian collections (Vatican Library, Laurenziana Library, Grottaferrata). The quires in these MSS are for the most part formed as quaternions.

**Françoise Briquel Chatonnet** spoke about quire and codex structure in Syriac MSS, mainly from the collections of the Syro-Catholic Patriarchate in Sharfeh and of the Syro-Malankara Church (India). Usually the quires are made of quinions, while quaternions are rarer for Syriac tradition; the Gregory rule is almost never observed in East Syrian MSS as well as in West Syrian ones. The making of Melkite MSS was strongly influenced by Byzantine tradition: quaternions are quite common for Syro-Melkite MSS. According to the observations by **Alain Desreumaux** presented by **André Bingelli** the same is characteristic for Christian Palestinian MSS: quaternion is the usual form of quire and the Gregory rule is observed in most cases.

**Pier Giorgio Borbone** and **Marguerita Farina** provided some curious examples of quire structure in Syriac tradition from the collection of the Biblioteca Medicea Laurenziana in Florence. Thus, a rare example of a single quire book in Syriac tradition is BML Or. 30 (73). Syriac MSS are most frequently composed of quinions. In the BML there is a number of MSS with mixed structure.

Speaking of the production of **Arabic MSS** **François Déroche** pointed out that there are no many pieces of evidence on quires in the extant fragments of papyrus codices. Parchment codices were produced by piling of folios cut in advance (the earliest parchment codices are the Qurans). Quinion is the usual structure of quires in Arabic MSS, especially those produced in the Middle East (some rare examples of ternions can be found in MSS originating from Spain and North Africa). The codices were normally stitched in three places. In quires hair side often is facing flesh side; loose leaves are sandwiched between bifolia. During the transitive period quite a number of mixed parchment/paper MSS were produced. Paper MSS normally have the same structure as parchment MSS.

The making of **Hebrew MSS** was thoroughly covered by **Malachi Beit-Arie**. The corpus of Hebrew MSS counts about 600 000 items; fragments mainly originate from Cairo Genizah. The only known Hebrew papyrus codex also comes from the Genizah collection. Main regions characterized by differences in manuscript production are the Orient (Middle East and Central Asia), Yemen, Sefarad (Spain), Ashkenaz (Germany, Central and Eastern Europe), Italy, Byzantium. Western tradition (especially Sephardic) is mainly Judeo-Arabic. Codex was adopted in Hebrew tradition not before the 8th century – much later than in Christian manuscript traditions. Early Hebrew parchment MSS follow the Gregory rule. Some codices (e.g. the Aleppo Codex, 10th cent.) were made by double folding of a parchment sheet. Quaternion is the most common form of the quire. Replacement of parchment by paper took place in the West no earlier than 14th cent.

**Jost Gippert** who was speaking about materials and quire structure of **Georgian MSS** has pointed out that the most widespread form of quires is quaternion, while less widespread are
quinions and trinions. There are a number of parchment scrolls where leaves are sewn together. One of the best examples of Georgian liturgical scrolls is Graz 2058 containing the Liturgy of St John Chrysostom and originating from St Catherine’s Monastery on Sinai. Papyrus codices are extremely rare in Georgian tradition: the mixed papyrus/parchment MS of ladgari is kept in the Patriarchate of Jerusalem; only one leaf has survived of the well-known Papyrus Psalter (Sin. georg. 98) on Sinai.

Sin. georg. N 13 and N 55 (166 fols.) – palimpsest containing Caucasian Albanian Lectionary and an Armenian Biblical text (lower layer) and multilingual texts in the upper layer.

Dickran Kouymjian made some important notes on the making of Armenian MSS. Rough number of MSS in total is 31 000/32 000 MSS; the majority is after 1600. Principal areas of manuscript production are Armenia and Cilicia; Crimea and Central Europe (13th – 18th cent.); Italy (13th – 14th cent.); Eastern Iran (Isfahan) (after 1600). Most Armenian manuscripts have preserved colophon (all MSS actually had colophons).

The only known Armenian papyrus is BnF Arm. N. 332 dated pre-640 (the date of Arab conquest of Egypt). The oldest dated parchment MS dates to 862 AD (in Mechitarists’ Collection in San Lazzaro, Venice) and is written in majuscule (erkatagir). The oldest minuscule (bolorgir) MS and the oldest paper MS at the same time is a religious miscellany of 981 AD (Matenadaran M2679). Usually MSS are written in one or two columns; three-column MSS are pretty rare (e.g. the Homiliary of Mush, Mechitarists’ Collection, Venice), no more than 5 examples in total.

The most common forms of quires are: quaternion (3 MSS from the 11th cent. and 7 MSS from the 13th cent.), quinion (2 MSS from the 13th cent.), senion (many from the 13th to the 16th cent.), a few MSS from the 13th cent. onwards contain quires of more than 12 bifolia (up to 20). Large-size MSS belong mostly to the earliest period while the small-size MSS are later.

The making of Coptic MSS was outlined by Stephen Emmel. The characteristic feature of most Coptic MSS is that they have survived partially. Papyrus bifolia were cut from rolls; they formed codices with various structure – from single-quire codices (quite common) to multi-quire books which may have either irregular forms of quires (e.g. Nag-Hammadi Codex 1 has) or more regular ones. In parchment codices the usual form of quire is quaternion; the folios disposition normally follows the Gregory rule. The largest surviving Coptic codex – Manichean prayer-book. The vast majority of paper MSS contain texts in Bohairic dialect, often in bilingual format (Coptic-Arabic). In paper codices quinions are the norm.

According to Susana Torres Prieto, the main feature of Slavonic MSS is two systems of writing - Glagolitic and Cyrillic (less than 1200 leaves of Glagolitic MSS (old and new) have survived it total: e.g. Codex Zographensis, Codex Marianus, Euchologium Synaiticum, Codex Assemanianus etc.); autographs and colophons are rare; the hands of copyists are usually conservative and there is lack of illumination. In the first five centuries 90% a all literary texts are translations. The majority of MSS are in paper dating to the 15th – 16th centuries. Quires follow the Byzantine system – the most widespread form is quaternion (especially in those regions where Christianity was professed in its Byzantine form after the Great Schism of 1054 – Slavia Orthodoxa as opposed to Slavia Latina).
2. Numbering of quires.

**M. Maniaci:** Book ordering in Greek and Oriental manuscripts has the form of quire/leaf signatures or catchwords. The system specific for each particular manuscript was intended for scribes rather than for readers (though the numbering is not always contemporary to the main text of a manuscript). The earliest example of quire signatures is Bodmer 2 (early 3rd century papyrus). In Greek MSS the numbering has various combinations: upper or lower margin – inner or outer, depending on sewing; sometimes there are signatures in both the beginning and the end of quire; the numbers used are mostly Greek letters (cf. digits – Latin or Arabic – in Latin tradition), sometimes there are words (later tradition). Regular quire numbering appears from the 10th century onwards (cf. late quire numbering in the Codex Sinaiticus). Eusebian Canon tables are usually not numbered. Sometimes the numbering is dependent on the text – every text has its own numbering within one MS. In some cases leaves are also numbered within quire. Pagination can be found in papyrus codices already. Catchwords are also known from the papyri. In addition to the numbering there are various marginal signs, such as quotation marks, chapter numbering, etc. There is a number of complicated tools to provide link between text and commentaries (in case if both preserved in a MS).

**D. Nosnitsin:** The oldest example of quire numbering in an Ethiopic Gospel Book belongs to the 15th century. Numbers are usually written in the upper margin along with indication of the text and the number of chapter and/or the feast (for liturgical use). Sometimes quire numbers are repeated twice or three times. Ornamentation – red and black dots. No examples of catchwords is known in Ethiopic Gospels MSS.

**E. Balicka-Witakowska:** Numbering in Ethiopic MSS is written in the top margin, left or right upper corner; sometimes the number is repeated up to three times. There is a sophisticated navigation system in lectionaries and other liturgical MSS.

**F. Briquel Chatonnet:** Quire numbers in Syriac MSS are usually written in the lower margin of the first and the last page of quire. Numbering is in letters, sometimes with decoration around them. The running title generally can be found in the beginning of quire. Catchwords came into use approximately in the 17th century, probably under the East Syrian influence.

**P. G. Borbone, M. Farina:** In the Rabbula Gospels (6th century) there is quire numbering marking the beginning of each quire in lower right corner with dot ornament around letter. Normally Syriac letters were used for the numbering: sometimes in serta, sometimes in estrangela. Page numbering with Syriac letters can be also found in Arabic/Persian MSS. The numbering is usually at the bottom of the page, sometimes there are Greek letters in addition to Syriac ones at the top and the running title was written on top of the first and last pages of each quire. Cross-shaped four points mark the beginning of Syriac texts in a later tradition (in verso only). Running titles appear as early as in the Rabbula Gospels.

**A. Bingelli:** “Mirror” quire numbering can be found in Christo-Palaestinian MSS and some Syriac Melkite MSS copied on Sinai.

**F. Déroche:** In Arabic MSS numbers can be either written in full or just indicated by Arabic digits. Catchwords appear quite late (not earlier than the 15th cent.), sometimes word is doubled in the lower and the top margin in consecutive page. Foliation is quite frequent in MSS
originated in the West. An interesting feature is the thread sewn in the pages to indicate a particular place in text (a “bookmark”).

**Johannes den Heijer** added that in certain Arabic MSS one can find up to three systems of numbering (including Syriac letters), e.g. in Hist. 1 from the Coptic Museum, Cairo (14th cent.), while there are some Syriac MSS extant containing Georgian numbering (Sinait. syr. 24).

**M. Beit-Arie:** Some non-biblical Hebrew MSS before the 10th cent. contain quire numbering. A Karaite codex written in Fustat in 1006 AD is written in Arabic letters and numbered with Arabic signatures. Bilingual quire signatures can be found from the 11th century onwards, e.g. in the earliest dated Bible MS written in Cairo in 1008 AD. Bifolia signatures are quite rare, mostly in Karaite MSS with Arabic numbering (AD 1146 – late 14th cent.). Mid-quire marks can be found in some MSS of Yemen and Palestinian origin. Catchwords as repetition of the last word of a quire/bifolium/leaf in the next page are not uncommon in Hebrew MSS.

**J. Gippert:** There are various types of quire numbering in Georgian tradition. Some notable examples: Sinait. georg. 37, 10th cent. – numbering in Georgian letters within an ornament; Sinait. georg. N 6 - double numbering, Georgian and Greek (the latter was probably added by a binder), while Georgian indicates both the beginning (top margin) and the end (lower margin) of quire; Sinait. georg. N 5 – three numbers can be found on one page. In Sin. georg. N 2p (paper Psalter) quire numbers are written in the top margin.

**D. Kouymjian:** The standard Armenian quire numbers can be found in the bottom margin of both the first folio (recto) and the last folio (verso) in the centre. Numbering is usually in minuscule Armenian letters (bolorgir). The Eusebian Canons also always use minuscule. Quire numbers may change their places – sometimes they can be found in the side margin (one of the Venice Mechitarists’ MSS), sometimes in the top margin (Echmiadzin Gospels, Matenadaran MS. 2374, 989 AD). Two systems of numbering: numerical (first ten letters of the alphabet used for numbering the first ten quires, then 10+1, 20+1 etc.) and alphabetic (all 36 letters of alphabet are used; for 11 the 11th letter of the alphabet instead of 10+1) – widely used from the 12th century in Cilician Armenian MSS. Transition from parchment to paper doesn’t affect the system of numbering quires. Catchwords are never used before the end of the 17th century and they are more characteristic for printed books.

**S. Emmel:** In Coptic papyrus codices the norm is pagination in the top margin, centered. In parchment MSS – pagination (recto and verso), top margin; quire signatures (first and last pages of each quire, often with ornamentation), though errors are frequent. Running titles can be found in Biblical codices. For paper codices foliation (in the top margin) and quire signatures are characteristic; running titles and catchwords are more frequent. Pagination exists in Sahidic codices mainly.

**S. Torres Prieto:** In Glagolitic MSS the numbering is in Glagolitic letters. Cyrillic MSS follow Greek alphabet rather than Slavonic in quire numbering. Catchwords appear under the influence of printing press. Running inscription can be the name of owner rather than the title of work.

3. Pricking and ruling.
M. Maniaci: Pricking is the preparation of parchment for ruling – on folded or unfolded bifolia. In the oldest Greek MSS (Codex Sinaiticus, Codex Vaticanus) – the pricks are within the column. In the later Greek MSS (minuscule) pricking can be found in both inner and outer margins.

Hard (dry) point ruling is the so-called “blind ruling”. Plummets and ink ruling – appear in Latin tradition from the 12th century while remaining very rare in Greek MSS (although vertical colour lines can be found as secondary ruling as early as in the 10th century.

According to J. Leroy, at least 13 systems of ruling can be identified in Greek MSS – the first and the most common – ruling on the hair side. There are about 700 types of lines in Greek tradition, including marginal lines, “limit” lines, writing lines, lines for headings, running titles, catchwords, numbers etc.

Instruments: ruling board with cords (mastara) was in use during late Byzantine and post-Byzantine periods. Ruling may have been made on three or four bifolia – this resulted in direct (primary) and indirect (secondary) blind ruling.

D. Nosnitsin: Marginal pricking can be found on any margin in Ethiopic MSS. Ruling was done normally on the flesh side of bifolium. Ruling formula: 1A-1A-1A1A/0-0/J. In some cases marginal lines lie between the text and the edge of the folio.

E. Balicka-Witakowska: Pricking was done with an awl or a large needle, ruling – with blind side of knife. Types of ruling: bifolium on the flesh side; single folio on the flesh side; single folio on the hair side. Horizontal ruling was done first, vertical – afterwards. The majority of ruling was made on bifolia. In some cases ruling may be abandoned (e.g. due to the size of folio).

F. Briquel Chatonnet: Marginal pricking preceded ruling in Syriac tradition. Ruling was made either with a blind instrument or with plummet.

P. G. Borbone, M. Farina: In the 5th and 6th century MSS only the upper margins and the columns are ruled (this ruling style survived until the end of the 9th cent.). Columns are separated through vertical lines, in some cases in later tradition there are horizontal lines for the running text. Plummet ruling can be found on both parchment and on paper. Dry point ruling was used on parchment only. Ink ruling is extremely rare and only on parchment.

Andre Bingelli: In Christo-Palestinian tradition ruling is systematic on the flesh side. It usually consists of four vertical limit lines and all the writing lines; sometimes marginal lines were added.

F. Déroche: In the earliest Arabic MSS there is only one vertical line marking the outer limit of the text. The use of mastara is quite common. The earliest Qurans have no visible traces of ruling, although there were definitely some instruments as the measurements are quite constant and the number of lines is constant.

M. Beit-Arie: Pricking on the outer margin is the earliest practice in Hebrew MSS. Only one MS contains pricking within the text (very close to the outer border).
Ruling as such goes back to the Sumer and Akkadian cuneiform traditions (clay tablets). The Tora scrolls always contain blind ruling. In the earliest parchment codices only outer lines are usually ruled with a hard point (blind ruling). Later tradition includes ruling with plummet or ink. In the earliest manuscript tradition bifolia were ruled on hair side only; later ruling was made on every single leaf (often without pricking), probably with ruling board. Ruling of four pages at once can be traced in MSS of European origin. Oriental paper MSS usually contain pricking of both outer and inner margins. Colour ruling can be found in Latin MSS from the 11th century, while in Syriac MSS it is much earlier than in the Western tradition (at least from the 6th century. – NS).

An interesting note is that the codicology of the Humanist MSS follow certain rules employed in Oriental MSS (e.g. Hebrew) rather than in Medieval Latin MSS

**J. Gippert:** In majuscule Georgian MSS ruling marks every line in the text as well as the margins, plus there may be a single line between columns; instrument – dry point (stylo). Pricking is usually on the side margins.

**D. Kouymjian:** Pricking is found in the earliest survived Armenian MSS on the outer margins, sometimes in the form of vertical lines; sometimes it can be found also in the inner margin. Ruling was done with blind point (late 10th – 11th cent.), plummet or red ink (the latter is characteristic of the 17th century MSS from Isfahan). Usually the text sits on the line, rarely hangs on the line or even between two lines. Mastara frame was in use in Armenian tradition for both parchment and paper MSS. A capital letter may have been used as a guide for vertical ruling. In some cases ruling may not be the same throughout one MS (e.g. in the Lazarian Gospels, 887 AD).

**S. Emmel:** Neither pricking nor ruling is testified in papyrus Coptic MSS except for one example. Parchment MSS contain simple pricking and ruling. Vast majority of texts are arranged in two columns. Pricking is in the outer margins, sometimes in top and bottom margins. Coptic uncial MSS often have no ruling. Ruling made with dry point can usually be found on the flesh side of bifolium. Bifolia were most probably prepared well before actual copying. Ruling is more complex in paper MSS; for them mastara was often used (three columns were ruled for two columns of writing).

**S. Torres Prieto:** Pricking and ruling do not exist in early Slavonic tradition. A. Djurova has worked out a very sophisticated system of Slavonic codicology.

In general, the workshop was particularly important. Its members discussed the problem of terminology, which seems to be crucial for the preparation of a handbook on the Codicology of Oriental Manuscripts. All the presentations contributed successfully to a general picture of a very complex phenomenon of manuscript production in Byzantium and the Middle East. It was important to see, on the one hand, how one tradition (especially Greek) made strong impact on others. On the other hand, each tradition has its own particularities which were very clearly presented by all members of the workshop.