

# PAPER HISTORY

Journal of the  
International Association of Paper Historians

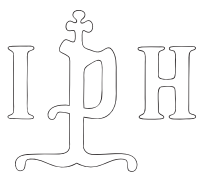
Zeitschrift der  
Internationalen Arbeitsgemeinschaft der Papierhistoriker

Revue de  
l'Association Internationale des Historiens du Papier

ISSN 0250-8338

[www.paperhistory.org](http://www.paperhistory.org)

International Association of Paper Historians  
 Internationale Arbeitsgemeinschaft der Papierhistoriker  
 Association Internationale des Historiens du Papier



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Printer Atlas-Plæhn Grafisk a/s

Paper meets ISO 9706 - 160g/80g  
 Manufacturer Husum,  
 Sweden

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## Letter from the President May 2011

Dear members of IPH

Many activities of paper historical interest have taken place since the celebration of the IPH 50 year's anniversary in Angoulême. Thanks to the successful organization of AFHEPP, Association Française d'Histoire du Papier et des Papeteries, all participants of the 30th IPH Congress can look back upon valuable days in September, full of good memories together with old and new friends. In the planning of the IPH Congress 2012 it will not be easy to follow in their foot steps.

In November 2010 the Chinese TV producer Liao Ye contacted IPH. In his planning of documentation in five sections of papermaking history for the National TV channel in China he needed suggestions from IPH for places of interest for the European section. Valuable information were collected from Józef Dabrowski and other IPH members about paper mills, factories and museums in Spain, Italy and France of interest for the Chinese documentation. The TV Paper & Civilization team planned to shoot in Japan, Southern China and Mid Asia in January 2011 and in Europe in February. However, because of a tight budget it was decided to shoot in Italy only at Museo della Carta e della Filigrana in Fabriano. That event is described in the notes of Giorgio Pellegrini and Professor Franco Mariani in this issue of IPH Paper History.

In Angoulême Peter Tschudin, Honorary president of IPH presented a suggestion for the 2012 IPH Congress in Basel and the Upper Rhine Region. There was a general agreement at the G.A. to make further investigations of this plan in spite of lack of possible involvement from SPH, the Association of Swiss Paper Historians, because of the rebuilding of the Basel Paper Mill Museum. Since September 2010 I have examined my idea of BAPH, the British Association of Paper Historians as a possible future host for a combined IPH/ BAPH congress in United Kingdom 2012 or 2014. The financial crisis, however, has resulted in severe problems everywhere for sponsoring of cultural events and activities, and the final answer from BAPH, which

I received in February for the hosting of the 2012 congress, was negative. IPH members, however, are most welcome to participate in the BAPH congress.

The International IPH Congresses, followed by publication of the Congress books every second year are the life lines of IPH in combination with the IPH periodical and the home page. This time a new way of organising the 2012 IPH congress is necessary, built on close cooperation between IPH and delegates from AFHEPP, DAP and SPH. It was therefore decided at the IPH Council meeting 11.03 to concentrate on the planning of the IPH 2012 Congress in the Upper Rhine Region. A provisional program and first announcement of the IPH Congress 2012 is published in this issue of IPH Paper History.

A most inspiring international congress about writing materials in the Middle Age has just taken place in Valencia. Analysis and studies of watermarks were central topics, several IPH members participated with papers, and a new edition of the Bernstein catalogue with emphasis of Spanish material was presented by Emanuel Wenger.

The study and research of watermarks is a field of still growing importance. European activities have started in 2011 for the development of an international standard for the registration of paper with or without watermarks. In that connection I met with Frieder Schmidt and Peter Tschudin after the Valencia congress to discuss the cooperation between watermark researchers in Europe and the use of the existing IPH International Standard for the Registration of Papers with or without Watermarks (Version 2.0 (1997)). Reprinting of the text as such was not agreed upon, but as a future substitute, images and texts of English, French, German, Spanish, Italian and Russian shall be offered for download on the IPH homepage.

Anna-Grethe Rischel

## Lettre de la présidente de l'IPH – may 2011

Chers Membres de l'I.P.H.

De nombreuses activités papetières d'intérêt historique ont eu lieu depuis la célébration du 50<sup>e</sup> anniversaire de l'I.P.H. à Angoulême. Grâce à l'organisation pleinement réussie du 30<sup>e</sup> congrès de l'I.P.H. par l'AFHEPP (Association Française pour l'histoire et l'étude du Papier et des Papeteries), tous les participants au dit-congrès peuvent se souvenir des jours exceptionnels de septembre, de bonne mémoire avec des anciens et nouveaux amis. Il sera difficile au planning du congrès de l'I.P.H. 2012 de renouveler ce succès !

En novembre 2010, un producteur de la TV chinoise, Liao Ye a pris contact avec l'I.P.H. dans le cadre de la planification d'une documentation en cinq sections sur l'histoire de la fabrication du papier pour la chaîne nationale de TV en Chine. On souhaitait de l'I.P.H. de faire connaître des lieux d'intérêt papetier, concernant la section Européenne. Des informations intéressantes furent recueillies par Joseph Dabrowsky et d'autres membres de l'I.P.H. au sujet de moulins à papier et de papeteries et Musées en Espagne, Italie et France d'un intérêt pour la documentation chinoise. L'équipe TV « papier et civilisation » envisageait de filmer au Japon, au Sud de la Chine ainsi qu'en Asie centrale en janvier 2011 et en février en Europe. Cependant, pour cause de budget trop étroit, il fut décidé de filmer uniquement en Italie, au Musée du Papier et du Filigrane à Fabriano. Cet événement est décrit dans les notes de Giorgio Pellegrini et du Prof. Franco Mariani reprises dans la présente édition de Paper History.

A Angoulême, Pierre Tschudin, Président d'Honneur de l'I.P.H., a présenté une suggestion pour le congrès de Bâle et de la Région du Haut-Rhin en 2012. Il y eut un accord général à l'Assemblée Générale d'explorer ce projet malgré l'absence de participation à la planification éventuelle de la SPH (l'Association des Historiens Suisses du Papier) suite de la reconstitution du Musée du papier à Bâle. Depuis septembre 2010 j'ai examiné avec la BAPH (l'Association Britannique des Historiens du Papier), en qualité d'invitée, l'idée à un congrès combiné aux Royaumes Unis des associations I.P.H. et BAPH en 2010 et 2014. La crise financière résulte partout en crises et problèmes sévères du sponsoring

des événements culturels. La réponse finale du BAPH tant que "hospitalier" en février fut dès lors négative. Toutefois les membres d'I.P.H. sont les bienvenus pour participer au congrès de BAPH.

Le congrès international de l'I.P.H. suivi de la publication – une année sur deux – du Livre des Congrès est la ligne de vie de l'I.P.H. Ceci en combinaison avec le périodique et le site web. Une nouvelle approche pour l'organisation du congrès I.P.H. 2012 est nécessaire à présent en vue de construire une proche coopération entre I.P.H. et des délégués de l'AFHEPP, de la DAP et la SPH. En conséquence, il fut décidé, à la réunion du Conseil de l'I.P.H. du 11 mars 2011, de se concentrer sur le planning de l'I.P.H. 2012 dans la région du Haut-Rhin. Un programme provisoire et la première annonce du congrès I.P.H. 2012 sont publiés dans présente revue Paper History.

Un congrès international particulièrement intéressant concernant les matériaux utilisés pour l'écriture au Moyen Age a récemment eu lieu à Valence. Les analyses et études des filigranes constituèrent un sujet central. Différents membres de l'I.P.H. y participèrent avec des papiers et une nouvelle édition du catalogue de Bernstein avec un développement de la présentation du matériel espagnol fut présentée par Emanuel Wanger. L'étude et la recherche des filigranes constituent un terrain d'une importance croissante. Des activités européennes ont démarrés en 2011 en vue d'un développement d'un standard international pour l'enregistrement des papiers avec ou sans filigrane. A ce sujet, j'ai rencontré à la suite du congrès de Valence Frieder Schmidt et Pierre Tschudin en vue d'un entretien au sujet d'une coopération entre les chercheurs européens et l'utilisation du catalogue existant I.P.H. d'enregistrement de filigranes (version 2.0 – 1997). La réimpression du texte tel quel n'était pas accordée, mais comme un substitut future les images et textes en Anglais, Français, Allemand, Espagnol, Italien et Russe pourront être downloaded sur le site web d'I.P.H.

Anna-Grethe Rischel

## Brief der IPH-Präsidentin, Mai 2011

Liebe IPH-Mitglieder,

Viele Aktivitäten von papierhistorischem Interesse haben stattgefunden, seit wir das 50jährige Jubiläum der IPH in Angoulême gefeiert haben. Dank der erfolgreichen Organisation durch AFHEPP, Association Française d'Histoire du Papier et des Papeteries, können alle Teilnehmer des 30. IPH-Kongresses auf wertvolle Tage im September zurückblicken, voll von guten Erinnerungen, die mit alten und neuen Freunden geteilt werden. Beim Planen des IPH-Kongresses 2012 wird es nicht einfach sein, in ihre Fußstapfen zu treten.

Im November 2010 hat der chinesische Fernsehproduzent Liao Ye Kontakt zur IPH aufgenommen. Bei seiner Planung einer fünfteiligen Dokumentation über die Geschichte des Papiermachens für den nationalen Fernsehkanal in China brauchte er Vorschläge der IPH für interessante Drehorte für den Teil über Europa. Wertvolle Hinweise über Papiermühlen und Papierfabriken sowie Museen in Spanien, Italien und Frankreich, die für die chinesische Dokumentation interessant sein könnten, kamen von Józef Dabrowski und anderen IPH-Mitgliedern. Das TV-Team «Papier und Zivilisation» plante, im Januar 2011 in Japan, Süd-China und Mittelasien und im Februar in Europa zu drehen. Wegen des engen Finanzrahmens wurde jedoch entschieden, nur in Italien im Museo della Carta e della Filigrana in Fabriano zu drehen. Dieses Ereignis wird von Giorgio Pellegrini und Professor Franco Mariani in dieser Ausgabe der IPH Paper History geschildert.

Peter Tschudin, Ehrenpräsident der IPH, präsentierte in Angoulême einen Vorschlag für den IPH-Kongress 2012 in Basel und der Region am Oberrhein. Auf der Generalversammlung herrschte Einvernehmen, diesen Plan weiter zu verfolgen, obwohl sich die SPH, die Vereinigung der Schweizer Papierhistoriker, nicht beteiligen kann, weil das Papiermuseum in Basel umgestaltet wird. Seit September 2010 habe ich über die Idee nachgedacht, ob die BAPH, die britische Vereinigung der Papierhistoriker, 2012 oder 2014 Gastgeber für einen kombinierten IPH- und BAPH-Kongress in Großbritannien sein könnte. Die Finanzkrise hat überall zu großen Problemen bei der Unterstützung von kulturellen Veranstaltungen und Aktivitäten geführt, und die endgültige Antwort der BAPH, Gastgeber des Kongresses 2012 zu sein,

kam im Februar und war negativ. IPH-Mitglieder sind jedoch willkommen, am BAPH-Kongress teilzunehmen.

Die Internationalen IPH-Kongresse in jedem zweiten Jahr, von der Herausgabe des Kongressbandes gefolgt, sind die Lebensadern der IPH in Verbindung mit der IPH-Zeitschrift und der Website. Ein neuer Weg, den Kongress 2012 zu organisieren, ist notwendig, gestützt auf eine enge Kooperation zwischen der IPH und Delegierten der AFHEPP, der DAP und der SPH. Auf der IPH-Vorstandssitzung am 11. März ist deshalb entschieden worden, sich auf die Planung des Kongresses 2012 im Oberrhein-Gebiet zu konzentrieren. Ein vorläufiges Programm und eine erste Ankündigung des IPH-Kongresses 2012 werden in dieser Ausgabe der IPH Paper History veröffentlicht.

Ein äußerst inspirierender internationaler Kongress über Beschreibstoffe im Mittelalter hat kürzlich in Valencia stattgefunden. Analyse und Untersuchungen von Wasserzeichen waren zentrale Themen, verschiedene IPH-Mitglieder haben sich mit Vorträgen beteiligt, und ein neuer Katalog des Bernstein-Projekts mit dem Schwerpunkt Papiere aus Spanien wurde von Emanuel Wenger vorgestellt. Die Untersuchung und Erforschung von Wasserzeichen ist ein Forschungsfeld, das weiter an Bedeutung gewinnt. 2011 haben europäische Aktivitäten begonnen, einen internationalen Standard für die Dokumentation von Papieren mit oder ohne Wasserzeichen zu entwickeln. In diesem Zusammenhang habe ich mich mit Frieder Schmidt und Peter Tschudin nach dem Kongress in Valencia getroffen, um die Zusammenarbeit von Wasserzeichen-Forschern in Europa und die Verwendung des existierenden International Standard for the Registration of Papers with or without Watermarks (Version 2.0, 1997) zu diskutieren. Wir haben uns geeinigt, den Text nicht wiederaufzulegen, aber als Ersatz sollen in Zukunft Bilder und englische, französische, deutsche, spanische, italienische und russische Texte als Download auf der IPH-Website angeboten werden.

Anna-Grethe Rischel



## Watermark Icons – or Words? With reference to methods of dating Malay manuscripts

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### Abstract

This article, while conceding that meticulous examination of watermark icons is intriguing and rewarding, challenges the common assumption, for the nineteenth century at least, that the icon is more important for interpretation than the other features in the watermark: the letters, the words, and the digits.

It analyses this question in the context of manuscripts in Indonesia and Malaysia written on writing paper imported from Europe in the eighteenth and nineteenth centuries.

It proceeds to outline tentatively some possible methods of utilising look-through features more effectively, specifically for dating codices. This would involve basic training, standardised methods of description and an online website. It could have application in other regions of the world, and it offers the prospect of rewarding areas of research outside Europe for paper specialists who are tempted to look further afield. An IPH presence in such regions could have very positive results.

‘A statement about watermarks is a standard feature in the description of drawings and prints in any respectable catalogue. But it seems to me to be essentially an empty, or formalistic tradition. These paper descriptions are invariably vague and imprecise; comparisons are made to such worthless albums as those of Heawood and Churchill. No reliance can be placed on these paper descriptions, and I do not know of any art historian who succeeded in using paper evidence competently as a tool of scholarship. What I wonder is, why then do they bother to mention and reproduce watermarks at all? And yet it is not difficult to imagine the potential uses that could be made of paper evidence in these areas.’<sup>i</sup>

That penetrating comment was written in 1988, and since then the hopes in the final sentence have been partially realised by a few very able specialists. But it is still a useful reminder for many of us, who still stubbornly put our faith in watermark icons<sup>ii</sup> and catalogues of icons. Whatever may be the position with art history, for my field what Paul Needham writes is substantially still true.

My watermark studies throughout have been focussed on Malay manuscripts, of which there are perhaps tens of thousands, to be found in the Indonesian region and in collections in Europe. They are nearly all written on European-made writing paper, imported during colonial times, and date mostly from the late eighteenth and especially nineteenth centuries. They are primary sources for research, linguistic, literary and historical. Examining and editing these manuscripts requires specialised linguistic skills.

But one ever-present problem facing the researcher is that often they bear no dates, and at best the dates are not dependable. The most effective solution to this problem requires no knowledge of the language whatsoever, it requires the skills of filigranology, skills which are familiar to members of this Association. It is a branch of the paper studies with which we are all familiar. So to meet this first challenge, to establish a reasonably reliable, if approximate, date for the writing or copying of a codex, the codicologist in the region must appeal to skills available elsewhere in the world. The paramount need at present is a method of dating which will be feasible for cataloguers who are not highly trained and who cannot devote much time to each manuscript.

Moreover what is required is a method which minimises the need for technology, particularly the making of images. These are not the usual circumstances encountered by members of IPH, but experience in this field may nevertheless be of interest to those who deal with nineteenth century papers elsewhere in the world. After all, in the eighteenth and nineteenth centuries increasing volumes of writing paper were exported from Europe to the then colonial territories, and many documents survive. It is on such papers that we are focussing in this study.<sup>iii</sup>

If we look at existing descriptions of the watermarks in Malay manuscripts in catalogues or online, we find some good descriptions, some inadequate descriptions, sometimes no mention of watermarks at all. In this they may not be very different from catalogues of manuscripts in other Oriental languages. Even the best do not give the user the information needed to identify and above all date the paper used. It is understandable therefore that scholars in this field too are dubious about the value of spending time describing and recording watermarks. What is the point?

In this field any progress in exploiting watermarks has been handicapped by the fact that, with one exception,<sup>iv</sup> up to say 1950, cataloguers scarcely recognized the existence of watermarks. What was written *on* the paper was challenging enough, with its strange scripts and languages. And when they did recognize watermarks the rather elementary techniques they adopted for handling them were dominated by a traditional European-based science of filigranology which was in effect a science of iconography. It was focussed on the variety of motifs found in the paper of old books which understandably give rise to so much interest and fascination. We have been extraordinarily slow to recognize that for our nineteenth century manuscripts this practice is inappropriate and sometimes virtually useless. Whatever may be the position with art history, for this field Paul Needham has got it right. We need to find a way out of the impasse.

Let us start by looking at the conventional definition of a 'true watermark' by Richard Hills:

'During the eighteenth century, watermarks in Britain became generally formalised with the actual watermark showing the size of the sheet in the centre of one half and the countermark showing the name of the papermaker or merchant in the centre of the other. The post horn, the fleur-de-lys and the figure of Britannia were typical examples of the true watermark.'<sup>v</sup>

This sums up the position nicely: In the eighteenth century 'typical examples of the true watermark' are icons, and three typical icons are mentioned.

One question that inevitably arises is: Do we have simple and effective means of copying watermark icons now? Has that problem been solved? The view on this of a fellow member of BAPH, Stephen Hill, in a recent email, is probably representative of current thought: "I completely agree on the need for a central database of watermarks (but for the need of an administrator,) but we still need an ACCURATE means of portraying the images. Descriptions, and (subject to which program one uses) quasi reproductions are all very well, but there's nothing like the real thing. I've tried everything there is by way of physically altering the original documents/blank sheets (always a blessing to get a sheet that hasn't been used!) but tracing paper and a light box are still the best this average schmo can get to."<sup>vi</sup> Of course many aids are available now, but none which is completely satisfactory.

Peter Bower too points out that we still lack effective means of imaging watermarks:

'The study of watermarks in paper is more complex than is often realised. Some of the assumptions behind some of the recent developments in watermark cataloguing and retrieval are seriously flawed. All too often all one has is a part watermark, or the mark is obscured by printed or written text or drawing or paint layers. Any successful method of swiftly matching often fragmentary, partly obscured or poor quality watermarks would be of immeasurable assistance to all those for whom watermark research is an essential part of their work. Any software needs to take into account the realities of the handmade papermaking process and flexible enough to deal with the complex variants, such as those described above, at play in the formation of a watermark.'<sup>vii</sup>

This argument will strike a chord with most of us. Few would question the difficulties of producing good images of watermark icons. Is there another way? Dare we relegate the icon to a secondary position?

To begin with, it may be worth considering a slightly broader definition of watermark by Phillip Gaskell. If hand-made paper 'is held up to the light it will show as watermarks a pattern of broad-spaced lines (chain lines) crossed by lines that are close together (wire lines), and some of the leaves may also contain a watermarked picture or legend.'<sup>viii</sup>

In Gaskell's definition, the 'actual watermark', yields its exclusive pre-eminent position to other look-through features, such as chain and laid lines, what would usually be called the 'secondary features'.

It reminds us sharply that watermark icons are not the whole story. In the paper of eighteenth and nineteenth century manuscripts, in addition to such icons, other even more significant features should be recognized, namely *words*, including individual letters, and also digits. I maintain that for these manuscripts – written mostly in the nineteenth century, with a few in the eighteenth and seventeenth centuries – we will get further by focussing on the letters and words to be found in the 'watermark' than on the watermark icon itself.

We have some helpful pointers. In 1982 E G Loeber wrote: 'On account of the resemblance or even exact

copy of the main marks from different mills, the countermark is our only possibility of finding out the maker of a paper.<sup>ix</sup> In fact the point had been made cogently as early as 1957 by Philip Gaskell<sup>x</sup>. ‘The original purpose of the watermark was probably that of the trade mark, to identify the maker of the paper in which it occurred and so both to advertise his wares and to guarantee their quality . . . At some early date, however, a change took place. In addition to the mark in the centre of one half of the sheet, a second and smaller mark (the *countermark*) began to appear elsewhere in the same sheet. The countermark generally took the form of the name or initials of the papermaker, and it appears to have been evolved because the watermark had ceased to fulfill its function as a trade mark. It became usual to place it in the centre of the half of the sheet not occupied by the watermark.

What seems to have happened was that certain watermarks had come to identify certain standard sizes of paper, rather than the maker of the paper.’

Precisely what ‘some early date’ would be I cannot say, but Heawood pushes it back, at least in France: ‘The more usual type of countermark, consisting of the maker’s name or initials, was in use in France quite early in the seventeenth century (they are not unknown even before 1600) . . .’<sup>xi</sup> What is clear is that identification of the maker of the paper goes hand in hand with establishing its date of manufacture.

In practical terms, we can set out our argument under three heads:

#### (i) *Watermark motifs or icons*

We have to concede that the icons, although they receive all the attention and can still be valuable, are far less tractable than the words. We know that handling watermark motifs involves reproduction of icons, and copying watermarks satisfactorily can involve quite complex equipment. Classifying, storing and retrieving the result requires complex resources.

Wishing to concede that icons if properly examined might have a role in dating paper I once wrote ‘Icons can be of use if one records the small changes in the format that take place from year to year. But that really requires images, and a careful reference corpus of

the icons and the changes. That will be possible, but is not easy.’ In practice, such a meticulously detailed examination of icons to establish whether two papers come from the same mould would be way beyond the reach of the cataloguers I have in mind, they do not have the time. But now I have to accept that even if they could, this could not be relied upon to furnish precise identifications.

Peter Bower, whose grasp of this matter is perhaps unrivalled, writes ‘The ignorance of all the variable factors involved in sheet formation and the resulting form and clarity of any watermark can lead to some serious misreadings of the information present in the sheet. Perhaps the most common, and unstated and simplistic assumption is that only when two watermarks are fully superimposable can they be from the same making, ie from the same mould and making. Paper is a batch process and despite the common identity between watermarks from different batches but from the same mould, there are considerable variations possible between the watermarks found even within the same batch of paper. It is quite possible for what appear to be different marks to have actually come from the same batch of paper. The two main reasons being (1) couch faults where any slippage of the mould during couching can distort the mark and (2) where the arrangement of the sheets in the drying loft can lead to considerable differences in shrinkage between individual sheets in the same batch. Those sheets nearer the louvres will dry faster and shrink differently to those papers hanging deeper in the loft, producing sheets that are smaller or larger than each other within the same batch.’<sup>xii</sup>

A further complication arises when icons are being recorded by non-English speaking cataloguers. Heawood (1950, p 23) writes ‘The names given to the different marks by different writers in different languages (and sometimes in the same language) vary greatly, and no consistent use has yet been established.’ Descriptions of icons by non-English speakers can require interpretation. A Malay cataloguer described one icon as ‘Permaisuri di dalam bulatan bermahkota’ (‘Princess in a crowned circle’), no doubt our Britannia. An Indonesian description I encountered last year read ‘Orang duduk di atas roda’ (‘Person sitting on a wheel’), probably denoting the same mark. A more terse Indonesian description of an icon reads ‘singa pedang’ (‘lion, sword’) no doubt denoting the Dutch lion.



(ii) *Letters, words and digits*

These can comprise names or initials of papermakers, legends in watermark icons, religious mottoes, digits to indicate a vat number or to show a year. In Malay manuscripts, the name of a papermaker or mill can often give an immediate clue to the age, as well as the provenance, of the paper. It is not always straightforward, for one thing names denoting papers in demand were sometimes taken over by other papermakers. (Although, ironically enough, this need not stymie the dating. If we can show that the ‘false’ mark appears in manuscripts which can be dated, this mark will give us an approximate date of writing for other manuscripts with the same ‘false’ mark.)

Letters in look-through can be registered reasonably satisfactorily with a little training, simple equipment,<sup>xiii</sup> and careful observation and recording. We can copy down (or more probably input) exactly what letters we see. Making an *image* of the look-through letters is always helpful, but is not essential. The overwhelming consideration is that whereas icons, particularly those used to denote leaf dimensions, *may occur in manuscripts ranging over a century or more*, names usually last *only a decade or so*. In view of these bare facts, our continued almost exclusive adherence to icons is puzzling.

(iii) *Chain line intervals, and shadows*

In laid paper, a very useful ancillary aspect to both of the above is to measure the chain line intervals in the leaves concerned. This provides an easily ascertainable clue to identify or distinguish papers, and if you are thumbing through a manuscript it is the most obvious signal that you have come to a new run of paper. Few catalogues of Malay manuscripts bother to record this easily identifiable and illuminating feature. In Asian papers (esp. Chinese and Islamic) which usually lack watermark icons it is often crucial to the identification. In those papers it is a variable feature which needs to be described carefully.

At the same time the cataloguer should note the presence or absence of another very significant feature, chain line shadows (or bar shadows). Although not always clear, when discernable this feature is invaluable as a general indication of the age of the paper.

## The 1800 AD watershed

It may not be just by coincidence that the catalogues of Churchill and Heawood, so widely used, provide reference sources for watermark icons up to about 1800 AD. This year proves to mark a watershed in the examination of manuscripts. There are good practical reasons to shift our emphasis, from about 1800 onwards, from the icons in the watermarks to what we have hitherto regarded as the secondary features. This date, taken *approximately* has a practical significance in watermark studies for other reasons. All paper prior to it is handmade. The felicitous circumstance that it is around 1800 that chain line shadows tend to disappear gives cataloguers a reminder that new norms must be adopted, that the accepted catalogues no longer serve. This is an invaluable practical clue which most cataloguers neglect to mention. The existing watermark catalogues, prioritising icons, take us up to about 1800, while our focus is largely on paper made after 1800 AD.<sup>xiv</sup>

*Building up a corpus of **dated** manuscripts for reference.*

For most codices, recording the form of the watermark, whether an icon or word, is not of itself of much value, it is of little use in establishing a date. Until we can relate it to a watermark elsewhere it tells us little, it is almost useless. We can indeed ask ‘Why then do they bother?’ In the past the watermark catalogues depicting icons sometimes gave a general indication of the nature and possible date of the paper, but after about 1800 AD even that is not forthcoming. Since there is no catalogue which will serve us into the nineteenth century surely we should endeavour to produce one. But now times have changed, we are in new territory, we can produce something much more ambitious than a volume of icons.

The obvious solution is the compilation of an online reference corpus, a searchable website database. This would comprise the icons and words found in our manuscripts, *including wherever possible the approximate date of their occurrence*. If properly designed this would become far more effective for identifying and ranking look-through features than any catalogue of the past. The lists of icons and of words should of course be indexed separately, in alphabetical order. (See sample in Appendices A and B).

This should provide the means to compile a database of effective manuscript descriptions in which we can confidently give many of the manuscripts approximate dates. If this is carried out rigorously, *as the database grows it becomes itself a constantly increasing and up-to-date reference source for each further manuscript being described*. Of course this presupposes that the codicologists describing the manuscripts are trained, and the descriptions are standardised.

### *Manuscript description*

How do we proceed? In this field we must acknowledge that cataloguers usually do not have the time nor resources for sophisticated manuscript description. Cataloguing these manuscripts in any case is in itself an enormous, painstaking task. We are focussing only on a tiny specialised aspect: the look-through features needed primarily to identify the paper, and above all to date the manuscript.

I would suggest a pro forma description template, albeit in provisional form. It should provide for basic codicological features and a careful description of the important look-through features. As a tentative guide, I propose the following:

Items to be included in the description of manuscripts on paper:

#### Physical description

Collection & number, language and title, dimensions, pages, etc., cataloguer's remarks.

#### Look-through features

*Paper Laid or Wove? Chain lines vertical or horizontal? Chain line shadows?*

*The distance of five chain-line intervals, Watermark icon, Countermark, names, letters and digits, Other look-through features.*

*Additional notes* Dates given by others, Cataloguer's estimated date for the manuscript, and entry for the database. Date that the document is described.

*Entry for database.* An example (from the John Rylands University Library):

(#1) Hollandia (#3) (Estd. 1850) (#4) JRUL Malay 10

(#2) A H K (#3) (Estd. 1850) (#4) JRUL Malay 10

The date is derived from a note by E U Kratz 'und wahrscheinlich um 1850 kopiert wurde'. [= 'and evidently was copied around 1850'].<sup>xv</sup>

It would join existing occurrences of A H K in the database. In my own list of names in watermarks the cluster would become:

A H K [Range 1843-1850] Cod. Or. 1931 Cod. Or. 1691 (1843) Cod. Or. 3327 (1846) Cod. Or. 12.124 Cod. Or. 12.126 Cod. Or. 6722 (1850) A'dam GU XI G 13 (1845) BQM1.1.1.8 Large Qur'an. JRUL Malay 10 (Estd. 1850)

In this the emphasis will always be on the words and letters, whether in the countermark or incorporated in the icon. Although letters in look-through can usually be discerned and recorded correctly, there will be times, especially with private collections in remote villages, when conditions make this difficult.<sup>xvi</sup> Often look-through features are vague, and perhaps only part is visible. Not infrequently we find misrecording even of what we regard as clear and familiar names. In the past year I have come across these variants of one which we know well: 'Jwhat MAN', JW HATMAN, JW HOTMAN. As our corpus builds up cataloguers will have an increasing number of models available to copy. Meanwhile it might be helpful to compile a simple list of the names of the main Dutch and British papermakers in the nineteenth century to which they could refer. This could also include letters *within* the icons, such as the half dozen different legends in the various versions of the Dutch lion mark.

Similarly, it might be helpful to compile a simple reference list of the names in English of the most frequent watermark icons. Some could be illustrated with simple drawings, just enough to be a guide to cataloguers. (See Appendix B.)

When considering these aspects, it is important to remember that only a tiny proportion of papers made in Europe reached the Indonesian region, and we can restrict our reference lists to the watermarks in those papers

## Dating manuscripts<sup>xvii</sup>

### *Dating by cluster analysis*

Assuming we have our corpus, or index, of look-through features of manuscripts, how do we arrive at an approximate date for a new manuscript which we want to date? Calculation of an approximate date for a manuscript can be achieved by what might be called cluster analysis<sup>xviii</sup>. Let us suppose a cluster of manuscripts is found to be linked together by sharing specific variable features, predominant of which in our case will of course be a name. A mark I have recently looked at,<sup>xix</sup> LUMSDEN, happens to bear a year of making in each example I have recorded. So we find nine examples: LUMSDEN + 1845, + 1845, + 1844, + 1844, + 1850 + 1820, + 1844, + 1850, + 1844. If we find another Malay manuscript with the LUMSDEN mark we can tentatively place it within the range 1844 – 1850, or better, to allow for the normal lapse of time between manufacture and use, say 1847 to 1853. In reality, only some of the manuscripts within a cluster will have dependable dates, so such a precise calculation is not usually possible. The reader may have noticed that one year in the cluster, 1820, (taken from a publication,) stands outside the cluster, it is suspect. The suspicion is reinforced by the fact that it appears in a letter dated 1772, and a 52 year lapse between making and use is very unlikely. This date must be excluded from our cluster until it has been verified.<sup>xx</sup>

The many sources available to us for compiling a corpus to aid in dating the writing of Malay manuscripts (not the date of manufacture) include:

- a) Collections of Malay correspondence in existing manuscript collections. Usually the dates given in letters are quite reliable.
- b) Texts of different kinds which can be dated reasonably reliably due to surrounding circumstances when they were written. These are fairly rare.
- c) Dated official documents associated with the area, such as colonial records (a good deal of the paper used for manuscripts came from official sources);<sup>xxi</sup> colonial archives can be found especially in the Netherlands and Britain. These on the whole are very reliable.
- d) In watermarked paper to be found in some early numbers of printed journals and in books published in the area. These are rare.<sup>xxii</sup>

- e) Collections of letters sent by local rulers to Dutch or British government officials in colonial times.
- f) Years incorporated in watermarks, found especially in British paper. The approximate date of writing can be obtained by adding three or four years to this date. There will be occasional exceptions. When compiling a reference corpus, where a watermark shows a year it is generally sufficient to record only this element of the look-through features.

*The three minimum requirements for indexes or a reference corpus can be summed up simply:*

- a) An alphabetical list of look-through features consisting of words, letters and digits. A separate alphabetical list of watermark icons.

*For each entry two items are essential:*

- b) Manuscript collection number.
- c) Actual or estimated date, where possible.

### Actual practice

The discussion up to now has been mainly theoretical, but how does all this work out in practice? I can only speak of my experience in the Indonesian and Malay manuscript field, which however will have parallels in other regions. Broadly speaking, we can say that until World War II there was little or no interest in watermarks, and since World War II the interest in the subject has steadily increased. We find that from about 1990 onwards improved catalogues of manuscripts have appeared which between them include all the essential features in their indexes, namely:

An alphabetical list of look-through features consisting of words, letters and digits, with watermark icons listed separately; manuscript collection number as well as catalogue page number; actual or estimated date of codex. Moreover, in some descriptions we find additional look-through features, such as paper laid or wove, measurements of chain-line intervals, whether chain lines lie horizontally or vertically, presence or absence of chain line shadows.

However to my knowledge no catalogue of manuscripts so far has consistently included in an index all three of what we have postulated as the essential requirements which can be inputted directly into a database. So most of the extensive data that have been collected and recorded cannot be automatically incorporated directly into a database as it is produced. It is beyond our use without further processing, which in practice is rarely feasible.



Sometimes watermarks are omitted altogether from catalogue descriptions. Sometimes they are described but not indexed. In fairly recent scholarly catalogues of the rich collections of manuscripts in the Netherlands the manuscripts and watermarks are carefully described. Each of them has been furnished with very carefully constructed indexes, including indexes of watermark icons and, more importantly, names in watermarks. The *icons* are listed in alphabetical order, so can be retrieved. Under the baneful influence of watermark icon-fixation the *names* are not set out in alphabetical order where they can be retrieved, but wherever possible attached to the icons. Thus if you search the index in one catalogue for “KONING & DESJARDYN” under ‘K’ you will not find it. In fact it is there, under ‘P’: “Pro Patria with KONING & DESJARDYN”, and perhaps also indexed with other icons. Some icons are accompanied by thirty or forty names, which consequently will be missing from their proper alphabetical position. Thus many most useful data, compiled with meticulous care, in practice are not retrievable. It is to be hoped that cataloguers in future will introduce this simple change of practice which would make it possible to incorporate their valuable data directly into a searchable database. We cannot assume that this will happen. In one instance a review of the first volume of an excellent catalogue of Malay manuscripts in the Netherlands<sup>xxiii</sup> strongly advocated this change in index compilation, but the second volume published nine years later showed that the cataloguer had not been persuaded, it remains in the old format.

It is fortunate that in these indexes names in watermarks with no accompanying icons are necessarily given their proper alphabetical position, and so can be retrieved.

There are websites recording descriptions of Malay manuscripts, but I know of none which fulfills the criteria put forward here. A website which does not give due attention to watermarks can in fact be a hindrance, for if funds have been furnished to describe a collection of manuscripts, it will be very difficult afterwards to persuade any funding body to supply further funds only to describe the look-through features.

### Estimated dates

With a competent description it is sometimes possible to give a range of possible dates for a codex. My own

conviction is that even with a competent description of a manuscript, one actually needs to see the codex itself, or at least a look-through image of relevant leaves, to arrive at a firm estimated date for it with any confidence. The conclusion must be that the *cataloguer* himself, if competent, should wherever possible offer an estimated date of writing.

Where a watermark includes a year, we are justified in suggesting as date of writing a year three or four years after that.<sup>xxiv</sup> Documents such as letters consisting of only one or two leaves may be kept much longer than that before use.

A corpus of information consisting of the annual indexes of the watermarks mentioned in *The Quarterly* is being assembled by the BAPH, and may eventually become a searchable database.

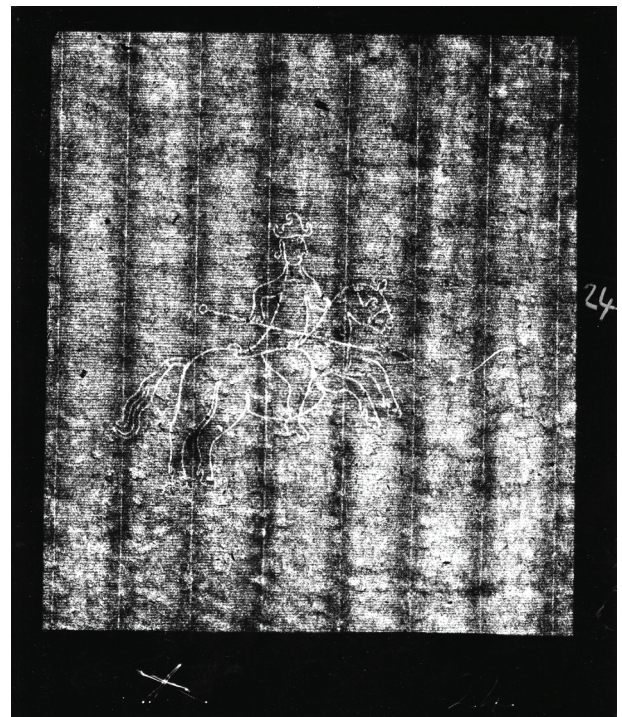


Fig. 1 Pre-1800 icon

This betaradiographic image of a watermark icon (in manuscript MS 40320 File VI no. 35 in the School of Oriental and African Studies in London) has no letters but it has distinct features, notably the chain line shadows, which permit an approximate dating. It is not absolutely identical with any figure in Heawood, 1950, but in that book the picador tracings (nos. 3467-3482) are given dates from 1749 to 1786, thus in the second half of the 18<sup>th</sup> century. This icon in fact occurs in a letter dated 23 April 1796. This mark is found also in another manuscript in that collection, dated 1793, and in a Leiden manuscript dated 1779.

## Transfer of skills

In Europe, specialists are building up a rich corpus of knowledge and skills regarding the look-through features of paper made there in the eighteenth and nineteenth centuries. One of the challenges now is to make this expertise available in regions to which the paper was exported. The need is for basic skills, not sophisticated science. And it is restricted to the papers exported in bulk, a tiny proportion of the types of paper produced in Europe. I mention this here because this could be an opportunity for an enterprising member of this Association to venture into that field, to pursue research and exchange expertise in an exotic tropical environment. There is the consolation that when you are with the manuscript collections you are no longer regarded as a stranger but rather as a respected specialist with coveted expertise. <sup>xxv</sup>

A final point. So far as I can see, IPH lacks individual or institutional members in some regions of the world, such as Indonesia, where membership could be very valuable. As an inducement, perhaps a concessionary subscription could be offered to the first institution in the region to take up membership. Such a link with Europe could become a productive channel for future codicologists there

## APPENDICES

### Appendix A

*Sample of index of words found in manuscript watermarks, taken from the writer's list:*

W HESSELINK Cod. Or. 2010 (1845)  
 G HIEBER & CO : : see separate file "Riksha &c".  
 N H & B JakML121 U5 (1808)  
 S H (1859) Aceh, Muhd. Arsjad colln. *Bustamu's-salatin*.  
 T H + 1795 (Crocker, Alan & Glenys. 1981; 10)  
 W HISSINK {Voorn 1985:620 mill operated 1858-95, see Caraka 10, 1987, 13} Cod. Or. 6671 Cod. Or. 11.048 (1852) Cod. Or. 12.152 (1855) Cod. Or. 12.159 (1855) Cod. Or. 12.168 (1857) Cod. Or. 12.171 Cod. Or. 12.172 Cod. Or. 12.183 (1857) Cod. Or. 12.188 (1854) Cod. Or. 12.231 Cod. Or. 12.233 (1860) Cod. Or. 12.234 Cod. Or. 12.240 (1860) Cod. Or. 12.241 (1860) Cod. Or. 12.242 (1860) Cod. Or. 12.243 Cod. Or. 12.246 (1860)

Cod. Or. 12.247 (1860) Cod. Or. 12.249 Cod. Or. 12.251 Cod. Or. 12.252 (1860) Cod. Or. 12.253 (1852) Cod. Or. 12.255 (1860) Cod. Or. 12.256 (1860) Cod. Or. 12.258 (1860) Cod. Or. 12.261 (1860) Van der Meij (see Caraka 10, 1987, 9-14) (post 1833).

H I V D Cod. Or. 6117

H V D (monogram) Breda KMA 107 B 6 (18 C)

HOESCHE BROTHERS +1861 Kl. 11 +1861 ? Kl. 184 (1862)

(The list includes a key to abbreviations denoting the different collections. For example, Cod.Or. indicates a manuscript in the Leiden University Library.)

## Appendix B

*Sample of guide-list for registering icons in watermarks*

Concordia → Lion

Crescent (cf. Moon-face)

Crescents, Two

Crescents, Three

Cross

Crown over fleur-de-lis → Fleur-de-lis, in crowned shield

Date → Year

Diamond

Diamonds, six

Dragon

Eagle

Eagle, Two-Headed

Eagle in oval, crude crown above

Eagle in oval + "NOTARO" {Ital for 'notary'}

Eendragt → Lion

## References

- Briquet, C.M. 1968. *Les filigranes, Dictionnaire historique des marques du papier dès leur apparition vers 1282 jusqu'en 1600*.
- Churchill, W.A. 1935. *Watermarks in Paper: In Holland, France, England, etc., in the xvii and xviii centuries*.
- Gaskell, Philip. 1979 reprint. *A new introduction to bibliography*. Oxford: Clarendon Press.
- Greentree, R. & E.W.B. Nicholson. 1910. *Catalogue of the Malay Manuscripts and Manuscripts Relating to the Malay Language in the Bodleian Library*. Oxford: At the Clarendon Press. It describes only eight Malay manuscripts.
- Heawood, Edward. 1950. *Watermarks mainly of the 17th and 18th Centuries. (Monumenta Chartae Papyraceae Historiam Illustrantia, vol. 1)*. Hilversum: The Paper Publications Society.



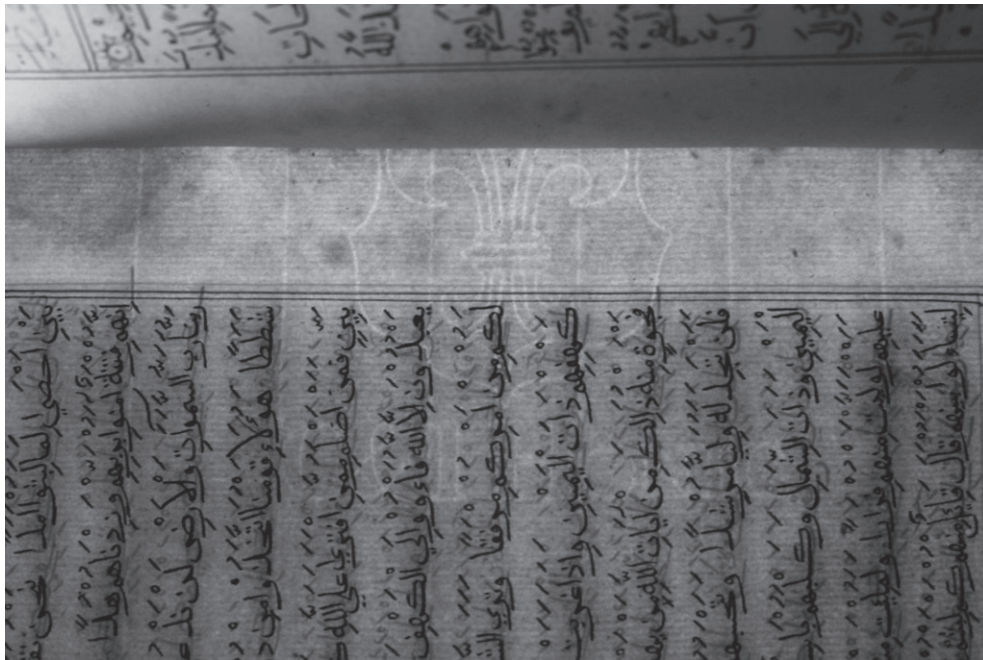


Fig. 2 Post-1800 words

This is a look-through image sent to me from Jakarta by Dr Ali Akbar. It represents a watermark in a manuscript Qur'an said by the owner to date from 1590 C.E. The codex of the Qur'an did appear to be very old, but as will be seen the look-through image does not support that. The three pertinent features are (1) The fleur-de-lys icon. This occurs over such a long spell of time that it is of little use for dating. (2) The absence of chain line shadows. This virtually rules out a date much earlier than about 1800 AD. (3) The name C & I HONIG is legible. The cluster with this name in my list comprises three Malay manuscripts, dated 1845, 1859 and 'pre-1869'. I would tentatively suggest a date around mid-19<sup>th</sup> century for this codex.<sup>xxvi</sup> In any case, we can safely rule out 1590.

Shorter, A.H. 1957. *Paper Mills and Paper Makers in England 1495-1800*. Hilversum: Monumenta Chartae Papyraceae Historiam Illustrantia, vol. 6.

Voorn, H. 1960. *De papiermolens in de Provincie Noord-Holland: De Geschiedenis der Nederlandse Papier-Industrie I*. Haarlem: Henk Voorn en de Papierwereld.

## NOTES

- i Paul Needham in *IPH Yearbook of Paper History*, Vol. VII, 1988, p 129.
- ii I use 'icon' to denote the figure or image which is usually referred to as a 'watermark'. 'Look-through features' is a useful term to denote all that can be seen by looking through the paper.
- iii I have discussed this in a paper 'Hidden traces: European writing paper goes to the east' to be published by the British Association of Paper Historians in October 2011.
- iv It is Greentree, R. & E.W.B. Nicholson. 1910.
- v Richard Hills, *The Quarterly* no. 57, 2006, p 5. See note ii above. I prefer to use the term 'icon' to refer to the so-called 'true watermark', and to adopt Phillip Gaskell's broader definition of 'watermark' (below).

- vi Stephen R Hill, in email dated 30-12-10:- "With regard to quoting my earlier e-mail ref. the reproduction of watermarks, please feel free to quote me as a named source."
- vii Peter Bower, in *The Quarterly* no. 68, 2008:24.
- viii Philip Gaskell, 1979 reprint. *A new introduction to bibliography*. Oxford: Clarendon Press, p 8.
- ix In *Paper mould and mouldmaker*. Amsterdam: The Paper Publications Society, p, 50.
- x Philip Gaskell. Notes on eighteenth-century British paper. *The Library*, 3rd series, vol. xii, pp 34-42, this passage on pp 35,36.
- xi Edward Heawood, 1929. The position on the sheet of early watermarks. *The Library*, fourth series, vol. 9, p 43.
- xii *The Quarterly* no. 38 2001:20.
- xiii A portable kit for measuring data on manuscripts can be assembled quite inexpensively. Instruments for measuring, with some tables for reference, such as Hijrah/Christian comparative calendars (many of the manuscripts are on Islamic subjects).

- xiv The existing watermark catalogues may even be mislead us: An uninitiated cataloguer finding a watermark icon in a nineteenth century manuscript may erroneously date the paper by identifying a similar icon in a catalogue of 18<sup>th</sup> century watermarks, and giving it the date of that.
- xv *Bijdragen tot de Taal-, Land- en Volkenkunde* (Leiden), 1974, 130:290 n. 4.
- xvi The ambient light in a well-equipped library may equally hinder the examination of a watermark!
- xvii Dating documents by their watermarks is the subject of an informative article by Ruby Reid Thompson 'Arms of London watermarks, a means of dating undated manuscripts', *The Quarterly* no. 38 2001, pp 1-10
- xviii A weakness of Churchill and Heawood is that their scope is so widespread that it is difficult to find a cluster sufficiently concentrated for us to give a likely date to a newly found watermark. This is compounded by the fact that icons may vary almost imperceptibly from decade to decade.
- xix It was the subject of my recent correspondence with Stephen Hill.
- xx I have since had a friend, Aditia Gunawan, verify this year in the manuscript, in the National Library of Indonesia. He confirms that the year is in fact 1850, so within our cluster.
- xxi For example the Sumatra Factory Records in the British Library in London contain an abundance of material for examination; most of the documents bear evidence to show when and where they were written, and the types of paper used correspond broadly in type and date with those often used for the Malay manuscripts produced in the same region. The potentialities for comparative study are evident.
- xxii For example, the *Tadjoe'l salathen* printed in Batavia in 1864, which has a Dutch *Erve Wysmuller* mark.
- xxiii In the *Bulletin of the School of Oriental and African Studies* 63 pt 3 2000:452-5.
- xxiv Russell Jones. 1988. From Papermaker to Scribe: The Lapse of Time. *Papers from the III European Colloquium on Malay and Indonesian Studies, (Naples, 2-4 June, 1981)*. Naples : Istituto Universitario Orientale.
- xxv See note iii.
- xxvi The name C & I Honig had been in use from the mid-eighteenth century (see Voorn 1960, pp 176, 135 &c) but so far as I know is rarely found in Malay manuscripts until about a century later). A single example is found in a Royal Asiatic Society manuscript, Raffles Malay no. 8, dated ca 1812.

## Letter to the editor

### Republishing the works of Włodzimierz Budka, a Polish paper historian

Józef Dąbrowski, Scientific editor of the 'Anthology'  
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Włodzimierz Budka (1891-1977), an eminent Polish historian and archivist – docent of history - dedicated the greater part of his scientific activities to paper-history. In his studies Budka successfully continued the investigations into watermarks started in Poland quite early and so fruitfully by Franciszek Piekosiński (1844-1906); combining them with studies on the history of domestic papermills that were initially developed by Jan Ptaśnik (1876-1930). Budka's original papers, together with his publications of source documents, expanded the borders of our knowledge of paper-history and paved the way for further works. Also his reviews are of significance and are supplemented with interesting information about additional facts and dedicated to the interpretation of existing knowledge. In his scholarly writings, Budka was meticulous in his references both to the sources and to earlier publications. He observed the same high standards of scientific exactness by which he measured others. In his professional activities Budka was on the senior staff of the State Archive in Krakow, where he continued his service until his retirement in 1964.

In December 2009, the Association of Polish Papermakers (SPP) issued the book entitled: *Antologia prac historyka papiernictwa Włodzimierza Budki* ('An anthology of the works by Włodzimierz Budka, a paper historian'), Łódź – Duszniki Zdrój 2009; 352 pages, format A4 (paperback), illustrated with tracings of watermarks, maps, and photos. All costs of publishing two hundred copies of the 'Anthology' were paid by our association (SPP). On the title page both our association (Stowarzyszenie Papierników Polskich) and its Historical Commission are mentioned, together with the museum at Duszniki. A shortage of time resulted in lack of any additional information in English in the 'Anthology'; in which, however, some papers are supplemented with summaries in English and/or in other foreign languages. In fact, the republished paper-historical works of Włodzimierz Budka are directed, first and foremost, towards domestic institutions and persons interested in paper-historical studies, as well as

towards such institutions and persons in the countries historically associated with Poland, where scholars still know the Polish language. After publishing the 'Anthology', I prepared the mailing list for the secretariat of SPP, selecting institutions and persons not only in Poland but also in neighbouring countries. Copies of the 'Anthology' were sent as a gift of SPP together with a short message prepared by myself and signed by Zbigniew Fornalski, a director general of SPP.

A biographical memoir of Włodzimierz Budka is included in the 'Anthology' (pp. 15f), based on the manuscript that was written by his wife, Zofia Kozłowska-Budkowa (1893-1986). She was an eminent professor of history in the Jagiellonian University at Krakow and an editor of historical sources. Fifty-nine of Budka's works, published from 1927 until 1980 (!), are re-published in the 'Anthology', pp. 17-313. As I have explained in my *Posłowie* ('Afterword'), the co-operation of his wife should be taken into account regarding the later and posthumous publications; Budka's eyesight was failing in the 1960s. However, his wife never mentioned her own contribution in such publications of her husband, writing about her involvement (regarding such later and posthumous publications) only in her correspondence with Jadwiga Siniarska-Czaplicka (1913-1986). The latter authoress collected the highest number of watermarks in Poland (partly following the results gained by Budka) and laid a solid foundation for the study of historical relationships between papermills and printing offices in Poland. The results of their joint investigations were published by Budka and Siniarska-Czaplicka in their 1965 paper. Its title in the English translation is: 'The papermill owned by the Archbishops of Gniezno in Keszycze near Łowicz'.

First paper-historical article was published by Budka in 1927 (pp. 17-19 in the 'Anthology'). It was his review of the bibliophile print (three hundred fifty copies in number) issued in 1927 at Krakow by Kazimierz Piekarski (1893-1944), an eminent Polish bibliographer and librarian. Its title in English translation is: 'Memorial on the origin and the later history of the Prądnik papermill'. Having found two lengthy and almost identical records extant in the Jagiellonian Library, Piekarski specified the date of establishing this first Polish papermill, based on references made in both the sources and confirmed by surviving paper samples. A papermill was

established in 1491 at Prądnik Czerwony (now within the boundaries of Krakow) on the land leased by the Holy Spirit Monastery, and paper manufacture was started there in 1493. [*Ordo Fratrum Canoniorum Regularium Sancti Spiritus de Saxia* was introduced to Poland in 1220 from France, from the city of Vienne, near Lyon. – JD] In addition, Piekarski questioned Ptaśnik's estimate of the productivity of sixteenth-century papermills in Poland. To his review Budka added two source documents on the Prądnik Czerwony mill, both written in Latin in 1576.

Reviews constitute an important part of further paper-historical writings published by Budka. Examples of substantial reviews are listed below, with numbers of the pages in the 'Anthology':

pp. 46f. In his review of the watermark album published in the Ukraine by Ivan Kamanin and Oleksandra Witwicka (Kyiv, 1923), entitled "Wodiani znaky na paperi ukrayinskykh dokumentiv XVI i XVII w.w." ('Watermarks in paper of Ukrainian documents of the 16th and 17th centuries') - Budka highlighted the lack of information where the manuscript was written on paper from which a given watermark had been traced. For any given watermark there is the date (or dates) in tables on the pages from 05 to 029, as well as the number (or numbers) of the book in Central Archive in Kyiv and the number (or numbers) of the leaf in the book. To the end the reader should possess the catalogue of the archive in which information is given where the book with the specified number was created. In spite of this defect and lack of marked chain lines in tracings, Budka positively evaluated the album with 1136 tracings of watermarks (30% of the second half of the sixteenth century, and 70% of the seventeenth century). In his opinion, the album is of significance for Polish filigranology, as containing so many Polish watermarks. [Witwicka had traced almost 3000 watermarks more; however, the attempts made by Orest Matsiuk (1932-1999) to find her tracings were fruitless. – JD].

pp. 78-82. In his 1938 review of the papers published by Friedrich von Hössle in *Der Papier-Fabrikant* XXXII. Jahrgang. (1934), Budka presented to Polish readers the results gained for *West- und Ostpreussen mit Danzig, auch Posen* by the late German author, who had started his paper-historical publications as early as in 1893 (a fact highlighted by Budka). In addition, Budka expressed his criticism of von Hössle's

work, for example his misleading information about papermills in the Poznan area (repeated by von Hössle after Ch. M. Briquet) and to a lack of information about some papermills that were active in the territory described by von Hössle. For example, Budka recalled information about a papermill active in Bielkowo (Ger. Gross-Bölkau) published by Paul Simson in his *Geschichte der Stadt Danzig* (Vol. II, p. 523), which was omitted by von Hössle. In addition, Budka mentioned a papermill in Pruska Łąka, also omitted by von Hössle. Budka added five of his own tracings of watermarks depicting the arms of the city of Gdansk, with the dates earlier than the dates given by N.P. Likhachev and by C.M. Briquet. Three watermarks are reproduced (p. 78) with dates: 1532, 1545, and 1555; and next two (p. 79) with the same date: 1557. Budka highlighted that their origin remains unknown. Further two watermarks found by Budka (p. 80) represent the Straszyn mill (nr 6 of 1617) and the Carthusian mill (nr 7 of 1611); later on Budka located the latter mill in Bielkowo.

[1] In his further studies Budka proved that the Straszyn pm had been established by Melchior Glaubicz (using the Glaubicz coat of arms), the councillor of the city of Gdansk/Danzig. In my opinion, the watermark depicting a fish within the circle with the initials CG, discussed by Budka, represents the Glaubicz arms. The initials CG could be understood as the first letters from the Latin *Consulis Gedanensis*. 2) Budka quoted Likhachev, in whose opinion a flounder was depicted in the Glaubicz arms. However, the Glaubicz arms came from Silesia, where the flounder was unknown. The Pierzcha (Pirche) family of Pomerania used a coat of arms depicting a flounder. However, the associations of this family with papermaking remain unknown. 3) When publishing that review in 1938, Budka did not know the dissertation *Ostpreussische Papierfabrikation* issued by Hans Kohtz (Stallupönen, 1935), so not all locations of Prussian papermills mentioned by Budka in that review are correct, therefore. 4) At the end of his review Budka recalled two watermarks found by him in Krakow, dated 1732 and 1768, both with the inscription legible for Budka as WEHLAU. The first of these was ALLAMODE PAPIER, and the second one had such an inscription beneath the Ślepowron arms, known in Polish heraldry. There was no papermill in Wehlau, and Prussian papermills did not use the 'à la mode' watermark, like the Ślepowron arms was not applied as a motif of watermarks in them. Most likely, the inscription was not clearly perceived



in densely written manuscripts, and it presented (in all probability) another name – BIELAU – a name of the Silesian papermill. – JD].

pp. 177-180. In his review of the account entitled “Opavska papirna” (The Opava papermill’), published in 1956 by Bohumir Indra, Budka presented to Polish readers the results gained by the Czech archivist, highlighting the export of paper from this mill to Poland (especially to its southern part) continued almost until converting the papermill into a corn mill (1872). Budka added his own three tracings of the watermark of that mill in its initial form (p. 177), dated: 1510, 1542, and 1544. The earliest known document is the privilege, written in the Czech language at Krakow (5 March 1507), given by King Sigismund I the Old, still a Silesian duke and the lord in Opava, to Albrecht Sobek, the captain (starost) of Opava, acting on the lord’s behalf. In his privilege, the king permitted Sobek (and his offspring) to convert a papermill in Opava into a corn mill, if necessary. Any earlier privilege of the king given to Sobek on the establishment of a papermill in Opava remains unknown. In spite of such not so easy beginnings, the Opava mill developed its paper productivity. Budka (pp. 178f) discussed the watermarks (characterized by Indra), adding (as always) his own remarks & comments, and finally informing about the watermarks of the Opava mill found by him in Polish archives (sometimes in Polish prints). He again recalled the watermark depicting the Ślepowron arms, but with the inscription beneath it: TROPPEAU (a German name of Opava).

[1] The Mieroszewski family, of the Silesian aristocracy, also used the Ślepowron coat of arms. Probably the Opava mill manufactured such watermarked paper ordered by the family. 2) Regarding the earliest form of the watermark applied in Opava, it was wrongly interpreted by Briquet, E.J. Labbare, and (after them) by Siniarska-Czaplicka. 3) Usually, Albrecht Sobek was presented (also by Indra and Budka) as a descendant of the ancient Silesian family: Sobek von Cornicz. However, in the second edition (posthumous and enlarged) of the genealogical book by Josef Pilnaček, the origin of A. Sobek was definitely clarified; cf. J. Pilnaček: “Rody stareho Slezska” (‘Families of the ancient Silesia’). Vol. 5, Brno 1998, p. 1226. Albrecht Sobek came from Sulejow in Little Poland (about 40 km north of Sandomierz), and he used the Brochwicz coat of arms (depicting a stag). – JD].

pp. 197-201. In his review of the watermark album entitled “Znaki wodne papierni Mazowsza 1750-1850” (‘Watermarks of Masovian papermills 1750-1850’) published by Jadwiga Siniarska-Czaplicka (Łódź, 1960), Budka highlighted both the diversity and abundance of historical source materials collected from archives, courts, and private collections by the authoress who also visited the places where the papermills were formerly active, finding descendents of their owners. In his opinion the initial date in the title (1750) is too early, as an earliest watermark in the album is dated 1774, and the relationship between watermark and countermark is not always clear in published tracings. In his discussion of 309 watermarks Budka re-emphasised in a table (pp. 200f) the chronological development of Masovian papermaking expressed in numbers of watermarks from sequential decades, starting from 1771-1781 and ending at 1841-1850. According to the results gained in the table, the initiation of papermaking in Masovia within the studied period was associated with the annexation (1772) of the territories by the Kingdom of Prussia, and Masovian papermaking became fully developed during the Kingdom of Poland (established in 1815, at the Congress of Vienna abd subordinated to Russia).

[1] Budka highlighted that the ‘Nec soli cedit’ watermark was of Prussian origin; however, such a watermark shown by Siniarska-Czaplicka with the initials ST (her No. 303 of 1815) cannot be attributed to any Masovian mill. Klaus Roemer proved that such watermarks (also with the initials J F ST) were applied in the Babalitz pm by the papermaker whose surname was Stienß; cf. K. Roemer: „Geschichte der Papiermühlen in Westpreußen und Danzig, nebst einem Anhang in für den Netzendistrikt“. Münster 2000, p. 57. The relatives of the papermaker probably worked in the Brodowe Łąki pm; Budka mentioned the initials IS (of Jan Stienfs or Styntz) in the watermark of 1846, and the initials KS (in watermarks of 1849) of his son.

2) Siniarska-Czaplicka described the Sikorz pm near Płock. Since its establishment in 1785 to 1830 the mill was run by the papermakers of the Francke family. The authoress was unable to detect who next ran the mill rebuilt in 1835; finding only the watermark of 1843 with the initials JK beneath the inscription SIKORZ. It is worth recalling briefly the work of H. Kohtz here, who made fruitless attempts to clarify the



name of a papermill: “Sykarzin bei Plotz” and such inscription as: “In Südpreußen auf der Mühle JerziKotz (=Georg Kotz) bei Plok”; cf. H. Kohtz: *Der Herkunft ostpreussischer Papiermacher*. In: *Papiergeschichte*, 4 (1954), pp. 2-9, here p. 3, p. 9 (Anm. 3). This is just information about the Sikorz pm near Plock ran at that time by Jerzi (Georg) Kotz (Kohtz), who tried to write his name and surname in the Polish style. - JD].

pp. 238-241. The watermark album entitled “Tromonin’s Watermark Album. A facsimile of the Moscow 1844 edition with additional materials by S.A. Klepikov”, edited translated, and adapted for publication in English by John S.G. Simmons (Hilversum, 1965) – was reviewed by Budka in 1968. In the initial part of his review, Budka presented to Polish readers the content of the album, a large publication with 1824 watermarks among which 1368 tracings had been prepared by Korniliy Tromonin. In the opinion of Budka, about 100 watermarks could be associated with Russian mills, more than 200 tracings with the mills active on territories of the Polish – Lithuanian Commonwealth and Silesia, while the rest of the watermarks originated from the mills active in western Europe. Budka dedicated more detailed remarks to the watermarks depicting Polish coats of arms and to Silesian watermarks, questioning some of their dates and/or origin (pp. 239-241). For example, such coats of arms in the watermarks of Polish mills remained unrecognized as: Nos. 413, 1523, and 1792 (the Żnin arms), No. 1208 (the Lewart arms), No. 1614 (the Cechi arms), No. 1622 (the Wizemberg arms), No. 1706 (the Reszka arms). The watermark No. 1463 is characteristic of the Silesian mill at Goschütz, not of a Polish one. In the opinion of Budka, too early dates were specified for such watermarks (for example) as: No. 721 of 1475 (a watermark of the Wrocław mill), No. 816 (the Bonarowa arms of 1513), and No. 992 of c. 1600 from the Silesian mill at Jarnońówek (Arnsdorf, Arnoldsdorf). Closing his review, Budka highlighted the carefulness and meticulousness of the editor in re-publishing that very old and rare watermark album.

[Budka questioned too early (in his opinion) date (1475) of the watermark No. 721 of the Wrocław/Breslau mill, recalling another watermark of this kind presented by Tromonin (No. 1280) and dated 1538. Neither the editor nor Budka noticed another watermark of this kind presented by Tromonin (No. 620) and dated again 1475. In my ‘Afterword’, all three watermarks are shown (p. 345, Fig. 3) and

commented. The watermarks No. 620 and No. 721 are (most likely) the twin watermarks, and they are similar to earlier Italian watermarks in paper documents kept in Wrocław/Breslau archives and libraries (known from first album of Piekosiński; Krakow 1893). It is perceived that the bull’s head was prepared in them from one piece of wire, and therefore, those twin watermarks of Tromonin (No. 620 and No. 721) seem to be older than his third watermark (No. 1280). The latter is completely different; it can be seen that the bull’s head attached to the mould has been prepared from a few pieces of wire. It is similar to the watermark found in Krakow by Piekosiński (his No. 1106, of 1503; in his second album; Krakow 1896), later repeated by Likhachev (his No. 3921), and finally by Briquet (his No. 15446). Similar watermark published by A. Rauter (re-published by F. von Hössle in 1935) and dated 1477 arose the question about its date; too early for Briquet and for Budka as well. The twin watermarks published by Tromonin are rather very rare. I have found only one such tracing showing the watermark almost identical to the watermark No. 620, published by Kohtz as a mirror image and in a reduced form (cf. H. Kohtz: *Ostpreußische Papierfabrikation. Stallupönen*, 1935, p. 26). The watermark is denoted as W.Z. 43 (1513-22), and it can be understood that such a watermark was present in paper documents (in Prussian archives) dating from 1513 to 1522. It looks therefore, that the Wrocław/Breslau mill applied in the first half of the fifteenth century two watermarks with the same motif and in a completely different elaborations (!); assuming that neither Tromonin nor Rauter was correct, regarding their so early dates (1475 and 1477) of such watermarks. Perhaps, however, Tromonin was right, and Rauter wrong. The twin watermarks found by Tromonin could be from the premature initiation of papermaking in Wrocław/Breslau about 1475; later on a papermill was stopped there. After the reactivation of the Wrocław/Breslau mill the new mould with the crowned letter W was applied (according to Briquet, the first watermark of the mill dated 1494, his No. 9158), and later also the mould with the bull’s head creating such watermark as that found by Piekosiński (of 1503, his No. 1106). Old moulds, producing such twin watermarks as those published by Tromonin, were occasionally used. There is little doubt that the beginnings of paper manufacture at Wrocław/Breslau were difficult; the first known document on this mill (found at the end of the 1950s) is dated 6 February 1490. In the Silesian manuscript written (in Latin and German) at Świdnica/Schweidnitz from 1471 to 1507,

there is not one sheet of paper from the Wrocław/Breslau mill (!), according to the results gained in careful investigations into the watermarks perceived in its paper; the distance between the cities is only about 50 km. The greater part of the manuscript is written on Italian paper, mainly from the Brescia region, and the first Silesian paper is dated 1499 and is used in the rest of the manuscript. The paper was manufactured in the Świdnica/Schweidnitz mill, and paper from the Nysa/Neisse mill was also found as dated 1503; cf. J. Ważyńska, J. Dąbrowski: *Sredniowieczny slaski rekopis koscielny cennym zrodlem filigranow* ('The medieval Silesian church manuscript as the valuable source of watermarks'). In: *Przegląd Papierniczy*; 54 (1998), pp. 403-406, 423f. – JD].

In 1935 Budka published his first substantial paper based on his investigations into sources and into watermarks in paper documents extant in archives, which is dedicated to the Balice papermill near Krakow (pp. 59-70) and supplemented with twelve figures (pp. 62-64), nine source documents in Latin (pp. 66-69), and crowned with a French *résumé* (p. 70). Regarding the figures, in the first of them the watermark of 1503 is shown (from the Nysa/Neisse pm) found in a Cracow print, and the second one presents the superexlibris (depicting *double fleur de lis*) used since 1527 by Seweryn Bonar, the founder of the Balice pm. The superexlibris and watermarks of the Balice pm are very much alike. Both are a simplified form of the Bonarowa arms (the coat of arms of German origin; in fact, parted *per pale*). The watermarks are shown in the following ten figures. A papermill was established in Balice within the period 1518-21 (the document of its foundation remains unknown), and its first watermark found by Budka dated 1521 (Fig. 3, p. 62) depicted a large version of the simplified Bonarowa arms. Budka's efforts to find source documents on a papermill in Bonarka (now within Krakow) were unsuccessful, so in his opinion, there was no papermill there. That earlier papermill of the Boners (in Poland called Bonars) is mentioned by historians, however, without any support in historical sources. Among other watermarks of the Balice mill published by Budka, there is a watermark of 1539 with the initials IH (Fig. 6, p. 63), recalling Jan Hockerman (or Hokermann), who later on (in 1546) built the first papermill in Transylvania at the town of Braşov (Hung. Brassó, Ger. Kronstadt), now in Romania.

Budka was not a specialist in paper technology; nevertheless, he ordered the examinations of three specimens of papers made in Balice about 1550. The results in the table (p. 65) specify: thickness [mm], basis weight [g/m<sup>2</sup>], breaking length [m], and ash content [%]. The latter documented that calcium carbonate was present in two studied specimens.

[1] Taking into account the loss on ignition, which for calcium carbonate is as high as 44%, these two specimens with their ash content detected as: 3% and 3.7%, in fact contained 5.4% and 6.6% of calcium carbonate. **This is probably the first reference to the presence of calcium carbonate in old European papers made by hand** according to the Italian method developed in Fabriano.

2) In the album "Popierus Lietuvoje XV-XVIII a." ('Paper in Lithuania in XV-XVIII c.'), published by Edmundas Laucevičius (Vilnius, 1967), the watermark is present (his No. 2131), which is very similar to the first watermark attributed to the Balice mill by Budka (Fig. 3, p. 62), dated 1521. However, Laucevičius (1906-1973) found the watermark dated noticeably earlier, i.e.: 1514, 1518, and 1520. Having known that, Budka considered the Nysa/Neisse mill as a producer of such larger watermarks with the *double fleur de lis* within the shield. In his altered opinion, smaller watermarks (such as in Fig. 4, p. 62) known from 1530 are characteristic of the Balice pm, which (in consequence) was established before 1530. In my 'Afterword' those questions are discussed (pp. 323f, Fig. 1). It is not possible to prove the thesis about early and large watermarks of the Nysa/Neisse pm depicting the *double fleur de lis* within the shield. In my opinion, such watermarks should be attributed to the Bonarka mill, hoping that its activities eventually gain the documentary evidence. The first papermaker referred to in Krakow documents is *Henrico papirmacher* (mentioned on 3 January 1499). However, the papermaker worked neither in Prądnik Czerwony nor in Mogiła; so he could work only in Bonarka.

3) Modern Krakow airport is situated just in Balice – JD].

Among other such papers dedicated by Budka to particular papermills only the more detailed accounts are recalled below, with numbers of the pages in the 'Anthology':

pp. 22-25. A papermill active in Poreba Wielka (about 50 km south of Krakow), from 1608 to 1730 according to the watermarks found by Budka. Ten tracings of them are reproduced (pp. 23-25), and all of them depict the Śreniawa Bez Krzyża arms also used by the Lubomirski family; the coat of arms which in the form of a watermark is strikingly similar to the Drużyna arms. A short description of the mill, according to the document in Polish of 1682, is added (p. 22).

pp. 114-120. A papermill active in Młodziejowice (about 10 km north-east of Krakow) to the middle of the seventeenth century; was described by Budka with presenting seven Latin documents. His further studies proved an earlier date for the founding the mill: before 1553. The paper is crowned with the map (p. 120), in which 1 cm represents almost 3.5 km in the land, showing the location of papermills near Krakow. [However, not all of the dates marked on the map for the establishment of the specified papermills are correct. Information about the activities of those mills based on further studies (also studies by Budka) is given in my essay entitled "Paper Manufacture in Central and Eastern Europe Before the Introduction of Paper-making Machines" (Fig. 16, p. 40) available at IPH website: [www.paperhistory.org](http://www.paperhistory.org) in 'news'. - JD]

pp. 121-125. A papermill active in Mniszek (about 70 km north-east of Krakow) from before 1575, according to the results gained by Budka, belonged to Cistercian abbey in the nearby town of Jedrzejów. More details of its activities are given from the periods 1586-1622 and 1783-1827. Seven watermarks found by Budka are shown, which depict coats of arms of sequential abbots, from c. 1588 to 1638. The first three of them depict the Reszka arms of S. Reszka (Fig. 1 of c. 1588. Fig. 2 of 1589. Fig. 3 of 1591) and the next shows the quartered coat of arms of B. Powsinski (Fig. 4 of 1611). The last three watermarks depict the coats of arms also used by Remigius Koniecpolski, i.e. the Pobóg arms, to which his initials RK are added (Fig. 5 of 1626. Fig. 6 of 1629) and his quartered coat of arms with the Pobóg arms in first part (Fig. 7 of 1638). The latter watermark has the initials RK above the shield and the initials AA beneath the shield, derived from Abbas Andreoviensis. The paper is supplemented with two tables. The first of these (p. 123) specifies the costs of materials and labour required to manufacture in 1827 at Mniszek one bale (i.e. ten reams) of various papers (chancery, draft, and cheap unsized printing paper). The last three rows in the table specify: all

costs, market price of one bale, profit from one bale; all in Polish zlotys and grosch. In the second table (p. 124) the watermarks are characterised, regarding their date, place of writing the manuscript, the collection in which the manuscript is kept. Initial remarks about the Mniszek pm Budka published as early as in 1931 (pp. 49-52 in the 'Anthology').

pp. 136-141. A municipal papermill of the city of Olkusz, located between the villages of Starczynow and of Żurada (about 40 km north-west of Krakow), which was active from before 1568 until 1620-50. Budka published a coat of arms of the city visible in the seal of its council (used from 1562 to 1596) with a name of the city: ILKUS (Fig. 1, p. 136). The mattock having a flat blade but adze-shaped on one side, which is turned down with its adze-shaped part and located between two towers of the town walls, is characteristic of the Olkusz arms, a leading motif of the watermarks found by Budka; Figures 2, 3, 4 (p. 136), and 6, 7, 8, 9 (p. 137); dated from 1569 to 1610. Another watermark (fig. 5, p. 137) depicts an eagle with the mattock on its breast (after 1588 to 1595), documenting in this way that the mill producing such paper belonged to the royal mining city, which Olkusz really was. It owed its establishment and development to lead ore (with an admixture of silver) mined there. Budka supplemented this account with eight documents (or their fragments) written in Krakow (from 1573 to 1668), mainly in Latin.

pp. 142-152. Six papermills active within the period 1531-1655 on municipal grounds outside the town walls of the city of Poznan, as well as in neighbouring villages belonging to the clergy (now, all these places are within the boundaries of Poznan), were described by Budka in 1954. In the first part of his account, Budka published nine watermarks (pp. 145f), and four of them in the second part (pp. 149f), together with the table (p. 150) describing all thirteen watermarks (from 1532 to 1626). The paper is crowned with two tables after R. Rybarski (p. 151) and with the document of 1534 written in German (pp. 151f). In the tables information from the Poznan customs house is given regarding numbers of bales and reams (sometimes with their origin) in selected years (the left table) and prices (in Polish grosch) of reams and quires (the right table). The first seven watermarks (dated from 1532 to 1672) depict keys crossed, with bits upwards and eyes downwards – visible in the Poznan seal of city councillors. Watermark No. 8 of 1542 depicts



the motif from the secret seal, in which the keys in saltire were beneath the Piast Eagle; however, the papermaker added the Łódzia arms (depicting a boat) between the eagle and the keys, to honour A. Górka, the general captain (starost) of Great Poland. The last five watermarks are from the Główna pm of the bishops of Poznań, and as such they depict the coats of arms of sequential bishops. Watermark No. 9 depicts the Ogończyk arms also used by L. Kościelecki, the bishop of Poznań from 1577 to 1597. Watermarks 10 and 11 depict the Grzymała arms also used by W. Goślicki, the bishop of Poznań from 1600 to 1607. Watermarks 12 and 13 depicts the Łódzia arms also used by A. Opaliński, the bishop of Poznań from 1607 to 1623; however, in the latter the initials GB are perceived, recalling Georgius Bolc, the papermaker and leaseholder of the mill.

[Budka mentioned foreign supplies of paper to Poznań, also by Jan Paur or Paurfainth (from Tham or Costrin). As I have recalled after F. von Hössle (p. 335, Fig. 2), it was a papermill in Neudamm built (according to the privilege of 1570) and ran by Hans Bauerfeindt. – JD].

pp. 153-162. Papermills in Lublin and Kock were also active until the middle of the seventeenth century. The first of these was established in 1538 at the nearby village of Tatary (now within boundaries of Lublin). The mill was destroyed by fire and later rebuilt and enlarged by Tomasz Wąs, a papermaker. Budka reproduced part of the royal privilege (p. 157) given by King Sigismund II August (15 April 1565) to the papermaker on the rebuilt papermill. This mill with its four waterwheels was the largest one in Poland at that time. Budka recalled the engraving with the view of Lublin, published in Cologne (1618) by Georg Braun (*Theatrum praecipuarum totius mundi urbium*), in which the papermill was shown (in spite of the fact that it was outside town) and mentioned by Braun in his short description of the view. Until 1593, paper was watermarked in the Lublin mill with the Topór arms (depicting an axe), the most popular motif among sixteenth-century Polish watermarks. It was followed in the mill by the Lewart arms (depicting a leopard) also used by the Firlej family, who also owned a papermill at Kock. In the opinion of Budka, a papermill was established in Kock after 1538 and before 1546. [A papermill was established in Kock before 1544. In “Likhachev’s Watermarks. An English-language version”, edited by J.S.G. Simmons and B. Van Ginneken–Van De Kastele (Amsterdam, 1994),

the watermark No. 3293 dated 1544 (Pt. 84) was attributed to the Kock mill. – JD]. Budka presented six watermarks of the Kock mill (pp. 159f) in slightly reduced versions (all depict the Lewart arms), together with a table (p.160) describing the watermarks dated from 1548 to 1607.

pp. 202-213. A papermill active in Keszyce is described in the account commonly elaborated by Budka and Siniarska-Czaplicka. The mill was established between the years 1562-65 by Archbishop J. Uchański. Watermarks of that Masovian mill, known until 1657, depict the coats of arms of sequential archbishops of Gniezno, and each of them was (at his time) the primate of Poland. Nine watermarks are reproduced in the account, together with a table (pp. 207f) presenting such information about the watermarks taken from manuscripts as: date of the manuscript, a name of the coat of arms, a place in which the manuscript was written, a shelf mark in archives. The texts of four documents are added (pp. 210-213): the first of them written in Latin (1645), a short letter in Polish (1645) signed by King Władysław IV, a short letter (1649) written in Italian by Archbishop Jan de Torres, a papal ambassador (nuncio) to Poland from 1645 to 1652; a short letter in Polish (1667) signed by King Jan Kazimierz.

Regarding the watermarks, the first three (p. 203) dated from 1565 to 1580 depict the Radwan arms also used by the founder of the mill. The next watermark depicts the Junosza arms with the initials SK AG (not always clearly visible), derived from S. Karnkowski *Archiepiscopus Gnieznensis*, and the watermark is known within the period 1597-1602. Its earlier and very modest version (No. 5; also p. 204) is known within the period 1590-94. The next watermark of 1613 (no. 5; p. 204) depicts the Jastrzębiec arms also used by Archbishop W. Baranowski. Two watermarks are present on next page (p. 205), No. 7 of 1617 depicts the Nałęcz arms also used by Archbishop W. Gembicki, and No. 8 of 1628 presents the Wąż arms (depicting a serpent) also used by Archbishop J. Wężyk. The last watermark (no. 9 of 1648; p. 207) depicts the Pomian arms also used by Archbishop M. Łubieński. [From October 1928 to April 1929, Budka made a study in Vatican Archives in Rome on the beginnings of a permanent Apostolic Nunciature in Poland. So Budka knew documents extant in Rome from *Nunziatura di Polonia*, recalling one of them in the essay on the Keszyce pm. – JD].

pp. 216-222. Oldest papermills in Ruthenian lands of the ancient Polish Commonwealth were discussed by Budka in 1966 because of the paper published (Kyiv, 1962) by Orest Matsiuk. In the Krakow document written in Latin, dated 30 May 1522, there is information about the papermaker Marcin 'of Ruthenian Janow' (*de Janow Russiae*), who before the Krakow Council ceded his rights to an inheritance from his parents to his brother Wojciech of Miedzyrzec. In the opinion of Matsiuk, the town of Janów Lubelski [The town situated about 70 km south of Lublin, and about 160 km south of Miedzyrzec, was established in 1640. - JD] was equivalent with that *Janow Russiae*. However, Miedzyrzec is only 40 km away from Janów near the River Bug [The town was established in 1465 by Bishop Jan Łosowicz and was initially called Janów Biskupi, to honour its founder, later on as Janów Podlaski. At present it is a village famous of its Arabian horses and situated 3 km south of the River Bug, being in this area the frontier between Poland and Belarus. - JD]. So the latter town should be considered equivalent with that *Janow Russiae*, in the opinion of Budka, who, however, had not found any evidence for making paper by hand in the town. In his opinion, the town of Janów near the River Bug was not the place of professional activities of the aforesaid papermaker Marcin, but only the place of his origin. In his account Budka also discussed two further papermills on Polish territory (Odrzykoń, Przemyśl) and six mills (Krechow, Busk, Ostrog, Nowy Staw, Łowczyce, Brzuchowice) in what is nowadays Ukrainian territory. His account is crowned with a French *résumé* (p. 222). Budka referred again to the subject in his review published in 1976; pp. 300-302 in the 'Anthology'.

[Interesting information and watermarks (a hundred and thirty-one in number) had been added to the subject by Mieczysław Gębarowicz (1893-1984) in his essay entitled "Z dziejów papiernictwa XVI-XVIII w." ('From the history of papermaking in the 16th – 18th c.'), published in *Roczniki Biblioteczne*, Vol. X (1966), pp. 1-114. Gębarowicz highlighted the informal character of such a name as *Janow Russiae* used by that scribe in Krakow for the town situated in Poland, accordingly to such a tendency towards supplying names of the towns in eastern Poland with the adjective *Ruthenian*, to distinguish them from the towns with the same name but located in central Poland. *Janow Russiae* is sometimes treated as the place where the first Ukrainian papermill was established, as early as before 1522, in spite of the fact that the town of

Janów Podlaski was (and still is) situated in Poland. In the opinion of Gębarowicz, a papermill did probably exist in Janów Podlaski; however, both documents about the supposed mill and its watermarks remain unknown. Gębarowicz presented more detailed information about papermills active in Busk, Nowy Staw, and Ostrog; adding tracings of their watermarks. – JD]

pp. 224-234. A papermill active in Sielec, now within the boundaries of Sosnowiec, remained unknown to historians until its discovery by Budka. It was established before 1572, perhaps about 1560, and it was active until 1656. A motif of the watermarks applied in the mill was the Półkozic arms (depicting a donkey's head), a coat of arms also used by the Minor family. Budka presented twelve watermarks (pp. 226-228) of this mill, together with a table (pp. 229f) offering additional information about the watermarks. The account is supplied with fragments of three Latin documents (p. 232) found by Budka in Krakow, written in: 1576, 1668, and 1679.

pp. 306-308. The first papermill in Warsaw was established shortly before 1524, at that time in the Duchy of Masovia, which became incorporated to the Kingdom of Poland after the death of Duke Janusz (1526), the last Piast in Poland. Documents associated with establishing the mill were found and published (1954) by Kazimierz Sarnecki (1909-1991); quoted by Budka (his Note #2, p. 308). Nevertheless, the watermark of this mill remained unknown until that publication in which Budka presented two photographs (p. 307) showing the watermark in papers dated 1536 and 1548. It depicts a coat of arms of the Duchy of Masovia: the Piast Eagle (without crown) within the shield. [Paper manufacture was continued in that mill until 1659; however, its further watermarks remain unknown. – JD].

pp. 309-313. Following the investigations into a papermill in Jeziorna mill (near Warsaw) carried out by Siniarska-Czaplicka, Budka reproduced (p. 309) a watermark of the mill found by the authoress in the 1778 manuscript, depicting a coat of arms unknown in Polish heraldry, with the IBK initials added to it in the watermark. According to the results gained by Budka, it was a coat of arms of Joseph Baron Kurtz (or: von Kurz). Budka presented his portrait (p. 310) and informed about three documents he had found in Krakow, all three addressed to King Stanisław August



Poniatowski and bearing Kurtz's signature but were not in his hand. The first letter was written in French (March 1775) and was supplemented with *Memoire* (also in French, but written earlier) on establishing a papermill for the benefit of the State and the poor. The third document was like a Polish translation of the *Memoire*, but it referred to not only starting of paper manufacture but also playing cards as well; the text of the third document was annexed by Budka (pp. 311f). Having lost a theatre directorship, Kurtz informed the king about his activities (started in the former year, i.e. in 1774) towards establishing a papermill in Jeziorna for producing domestic paper of good quality from domestic rags collected by the poor earning money in such a job. Having supported financially this project, King Stanislaw August Poniatowski became a co-founder of the royal papermill at Jeziorna. His coat of arms is visible in first known watermark (1776) of the mill established in 1774. The results gained by Budka are confirmed by such old watermarks of that mill in which just the year 1774 is recalled. Budka also presented information about *Johann Joseph Felix von Kurz genannt Bernardon* according to the gathered publications (domestic and foreign) dedicated to the last great actor and author of German improvised comedy. [Recently Jeziorna has united with the city of Konstancin, under the common name: Konstancin-Jeziorna. – JD].

Among the republished paper-historical writings of Budka, there are also official registers with information about papermills, their owners (or leaseholders), and their workers. Finding and (later) publishing them by Budka was of the utmost significance towards directing further searches for both watermarks and additional documents of those mills listed in the registers. Sometimes such information was propagated by Budka in his reviews of publications issued by other authors. In the 'Anthology' such his accounts are republished on following pages:

p. 45. Papermills near Krakow, according to the register of 1595;

pp. 93-95. Papermills in the Kingdom of Poland in 1858, according to the old manuscript extant in the Polish Academy of Sciences in Krakow;

pp. 133-135. Papermills in the Duchy of Warsaw and in the Kingdom of Poland (1810-1830), a compilation from old manuscripts and official reports;

pp. 166-173. Papermills in the Kingdom of Poland in 1823, according to the official (but not fully completed) register of 1823, with detailed information also about the productivity (point "d") and watermarks (point "e") of thirty-four mills. Their location is shown on the map (p. 168) elaborated to illustrate the data from the 1823 register.

p. 174. A few remarks on seventeenth-century papermills near Krakow taken from the reviewed book presenting old inventories of the estates;

pp. 175f. Information about papermills near Krakow taken from the reviewed book presenting the register of 1629.

Budka also found the manuscript written c.1850 describing in detail the techniques of the papermaking craft at that time; it is republished in the 'Anthology' (pp. 98-113). Two papers of Budka are known to western paper historians, both published in German. The first of them, dedicated to the Hamernia pm (in south-eastern Poland) and published in *Papiergeschichte* [Jg. 14 (1964), Heft 5/6, pp. 63-65], is also republished in German in the 'Anthology' (pp. 195f). The second one, dedicated to the Dukla pm and published in *IPH Yearbook of Paper History* [Vol. 2 (1981), pp. 255-264], is not republished in the 'Anthology', in which, however, its original (Polish) version is republished (pp. 303-305). Its German version was supplemented with a map informing the foreign readers about the location of Dukla.

The papers and reviews published by Budka are republished in the 'Anthology' in a fully completed form. As a scientific editor of the book, I have checked and corrected the material that was tentatively prepared for printing the 'Anthology', correcting also any printing errors present in original publications. Both checking and correcting of the material before printing the 'Anthology' were difficult and time-consuming jobs, requiring both great care and a detailed knowledge of paper-history. The original Budka publications were scanned by Leszek Goetzendorf Grabowski, who also wrote *Słowo wstępne* (p. 9, 'Preface') and prepared the biographical memoir of Włodzimierz Budka for its publication in the 'Anthology' (pp. 15f). During such scanning, a special program was in use to transform pages of the scanned publications into active files in Word, which could be further processed to prepare the material for printing the 'Anthology'.

In this method, however, some letters and digits may be deformed or even replaced by others, especially in such places where printed letters and digits are not so clearly distinguished from discoloured paper (due to its ageing). This phenomenon was especially frequent in 'Notes' printed with smaller characters in Budka's papers & reviews. For this reason, I had to decide what would be included or left out from the book published by Budka in 1971. Its title in the English translation is: "Sixteenth-century papermills in Poland. The works of Franciszek Piekosiński, Jan Ptaśnik, and Kazimierz Piekarski; republished with additional material by Włodzimierz Budka". There was a need to cease the republishing the works by F. Piekosiński, J. Ptaśnik, and K. Piekarski; which were republished by Budka in 1971 with many notes to which his own comments were added; all of them printed with very small characters. And therefore the danger was too grave that the text of such notes and additional comments would be spoilt during the transformation to computer files. However, the remarks presented by Budka in his 1971 book are frequently recalled in my 'Afterword'.

Finally, only two fragments of the 1971 book are present in the 'Anthology', namely:

1). *Przedmowa Wydawcy* ('A preface of the editor') – in the 'Anthology' p. 247 and initial part of p. 248;

2). *Znaki Wodne Papierni Rzeczypospolitej Polskiej XVI w.* ('Watermarks of sixteenth-century papermills of the Polish Commonwealth') - in the 'Anthology' starting from the second part of p. 248 to p. 299. The watermarks of sixteenth-century papermills in the Polish Commonwealth are republished (pp. 257-299); two hundred seventy-six in number (1:1).

On p. 248 there is *Spis Reprodukcyj Znaków Wodnych* ('A list of the reproductions of watermarks') together with *Wykaz Ważniejszych Skrotów Użytych w Spisie Znaków Wodnych* ('A register of more important abbreviations used in the list of watermarks'); the latter shows abbreviations used to denote the collections in which those manuscripts are stored which paper was taken to tracing watermarks. The tables with information about such manuscripts are on pp. 249-256. In these tables there are such columns as:

*Lp.*, i.e. Ordinal number

*Rok*, i.e. the year in which the manuscript has been written

*Miejsce zapisu*, i.e. the place where the manuscript has been written

*Miejsce przechowywania*, i.e. the collection in which the manuscript is stored (the abbreviations from the register on p. 248 are used there)

*Sygnatura*, i.e. shelf mark (or catalogue number) in the collection.

Above the table on each page from p. 249 to p. 256 there is a name of the papermill which initiate the table. For example, on p. 249 there is (above) the table: 1. *Prądnik Czerwony (Duchacki)*; on p. 250 there is (above) the table: 4. *Mogila c.d.* (i.e. continued); etc., etc. This is such a small error, as these initial names should also be within the table, not above it. Nevertheless, I decided not to modify such errors (it could be troublesome for us), keeping in mind that such errors are not so important.

In the table (p. 253 there is the point 13. *Nieumiejscowione papiernie małopolskie* ('Unlocated papermills in Little Poland'). The latter name (Małopolska, i.e. Little Poland) is derived from the Latin term: *Polonia Minor*, in fact, meaning 'Poland the Younger' (i.e. south-eastern Poland with Krakow), and it is distinguished from *Polonia Maior*, i.e. 'Poland the Elder', where the Polish State was initiated (i.e. central-western Poland with Poznan); the latter however is commonly called Wielkopolska (i.e. 'Great Poland').

There is in the point 13 the watermark denoted III 176 (p. 284), dated 1548. Further studies carried out by Budka (pp. 303-305) attributed the watermark to the Dukla mill, established before 1546 by J. Jordan, using the Trzy Trąby arms (depicting three trumpets).

The last watermark in the point 13, i.e. the watermark denoted XII 200, dated 1600 - is shown as the last one on p. 287. This is an error, because this watermark depicts the Cechi coat of arms of Baptysta Cechi, an Italian, who was an owner (at that time) of the Czajowice pm near Krakow. So the watermark denoted XII 200 is not from an 'unlocated papermill in Little Poland'

but from the Czajowice mill. I clarified this in my 'Afterword', informing (p. 347) about the letter (dated 31 VII 1974) of Kozłowska-Budkowa to Siniarska-Czaplicka. There was information that the last author's revision had not been taken into consideration by the publisher of the 1971 book owing to a shortage of time. The Czajowice mill was well-known to Budka, who mentioned in his papers and reviews not only the mill but also its owners and watermarks.

One papermill of northern Poland remains unknown, and its watermark (under inscription "Papiernia nieznana") is shown as denoted No. 259 (p. 297). The watermark from the manuscript dated in 1601 at Bydgoszcz/Bromberg depicts the Grzymała coat of arms.

Regarding other papermills for which the founders and owners are known although their exact locations remain unknown, Budka presented four watermarks (p. 268) dated from 1520 to 1540 of the mill founded by Chancellor K. Szydłowiecki and seven watermarks (p. 282) dated from 1551 to 1585 of the mill established by Krakow Cathedral Chapter. The latter mill marked its paper with the Trzy Korony arms, a coat of arms of the chapter, depicting three crowns (2, 1) within the shield.

Five watermarks of the Miała mill (pp. 296f) are dated from 1576 to 1597; however, in the table (p. 255) they are listed under an inscription "27. Miała (Chelst)". This is an error; there was another papermill in Chelst. Two watermarks (p. 297) dated 1564 and 1582 represent the municipal papermill of Toruń/Thorn, which was situated not in the city but in Pruska Łąka, about 20 km north-east of Toruń. Probably two watermarks marked by Budka with asterisks and denoted "Przysiersk ?" (p. 298), dated 1577 and 1579, should also be attributed to the municipal mill of Toruń.

Heraldic motifs are the dominant in Polish watermarks, and this is associated with the complexities both of a search for them and of studying the watermarks. To render the peculiar character of Polish heraldry, it should be highlighted that in the Polish heraldic system each coat of arms has its own name, and a number of unrelated families, usually with different family names, may use the same unaltered coat of arms. In my earlier remarks in this account I have written about 'a coat of arms also used by a specified family', and

the word 'also' emphasized such peculiarities of Polish heraldry, as well as the studies of Polish watermarks. For example, most popular was the Jastrzębiec coat of arms, depicting a reverse horse-shoe with a cross formée in the middle (with 'jastrząb', i.e. a hawk, in its crest, giving a name to this coat of arms), was used (over the centuries) by almost nine hundred families (!). Among the watermarks of sixteenth-century papermills of the Polish Commonwealth published by Budka in his 1971 book (and republished in the 'Anthology') the Jastrzębiec coat of arms is perceived three times. Firstly, in the watermark # 35 (p. 262, dated 1579) with the insignia of the office of the bishop, used in the mill at Prądnik Biskupi (also known as: Prądnik Biały, Prądnik Mały, Żabi Młyn) when it was owned by Krakow bishops, during the pontificate of Bishop Piotr Myszkowski (1577-91), who also used the Jastrzębiec arms. Secondly, among initial watermarks of the mill at Grembienie (also known as Korzkiew) established by the Zborowski family, who also used the Jastrzębiec arms; numbered: from 122 to 131, 133, from 136 to 138 (pp. 275-277), dated from 1557 to 1581. Thirdly, in watermarks of the Okleśna mill numbered from 153 to 158 (p. 280), dated from 1581 to 1600, for all proprietors (of different families) of that village and of the papermill also used the Jastrzębiec arms.

Regarding the coat of arms belonging to only one family, it is denoted as 'the own coat of arms', and its name is (usually) the same as the family's name. Such coats of arms are much younger and originate mainly from later ennoblements as well as from the bestowing of Polish ennoblement upon foreign noblemen. Both such cases are illustrated among the discussed watermarks gathered by Budka. Watermarks of the Mniszek mill numbered from 203 to 206 (pp. 288f) depict a coat of arms of Abbot Stanisław Reszka (a Pole), and the coat of arms was also called the Reszka arms; and the watermark # 200 (p. 287) of the Czajowice mill depicts a coat of arms of Baptysta Cechi (an Italian), which was also called the Cechi arms.

The watermarks of sixteenth-century papermills of the Polish Commonwealth are followed by four Budka's publications (pp. 300-313) and finally by the bibliography which title in the English translation is: 'Bibliography of the works by Włodzimierz Budka in the history of the Reformation, auxiliary sciences of history, history of Polish culture and literature' (pp. 314-316). The bibliography was supplied by the State

Archive in Krakow, who also conveyed photographs of Włodzimierz Budka to their reproductions in the 'Anthology': p. 13 photo in the 1960s, p. 39 photo in the 1920s, p. 85 photo in the 1940s, p. 189 photo in the 1960s. As is seen from the appended bibliography, his published works dedicated to other fields of history are a hundred and twenty-two in number and in the form of rather short articles. However, also those publications are based on source historical documents as elaborated by Budka, the eminent specialist in auxiliary sciences of history, especially in: sigillography, numismatics, chronology, and expertness of historical sources. Few, therefore, are competent to judge his entire academic achievements.

Włodzimierz Budka and his wife Zofia had left unfinished elaborations dedicated (mainly, but not only) to the papermills in the Krakow area and their watermarks. After their deaths in 1977 and 1986 respectively, attempts were made by the Library of the University of Łódź to take the materials which remained in Krakow after Budka and his wife for completing their unfinished accounts. However, the Jagiellonian Library eventually acquired the material but it remains in storage and no further work has been done. Unfortunately enough, it has not been possible to continue the studies carried out by Siniarska-Czaplicka. Such continuation was planned in the University of Łódź with using her 'paper-historical workshop'; the most valuable part of which consisted of the watermark albums owned by the Pulp & Paper Research Institute (ICP) in Łódź, where the collection had been initiated by Jadwiga Marchlewska (1908-1973), the founder of the institute. Those watermark albums were temporarily borrowed by the Duszyni museum from ICP; however, shortly thereafter they were written into an inventory of the museum. It made impossible the recovery of those watermark albums from the museum to convey them to the Library of the University of Łódź for continuing there both research and didactic activities in traditional paper-history. The watermark albums were ultimately sold by ICP to the museum situated in the tiny town (Bad Reinerz, before 1945) near the frontier between Poland and Czech Republic. Even for scholars of Wrocław, the nearest large city with vast library and archival collections, the distance of 110 km is too long to visit the museum for studying the watermark albums; to say nothing about scholars of other large cities in Poland. In the ensuing situation in Poland, there is an urgent need to sensitize to the subject of paper-history, especially to the history

of papermills and their watermarks, both archivists, scholars involved in book-science, librarians, and paper restorers. In their professional activities all of them stay in touch with ancient documents and with ancient hand-made papers, giving them an opportunity to collect paper-historical evidence and watermarks. I do hope that the republished paper-historical works of Budka, supplemented with my 'Afterword', will support all of them in such activities.

Regarding Budka's paper-historical writings, in my opinion they must be judged not only by the definitive nature of their content but also by their considerable assistance to other scholars in expanding the borders of our knowledge about paper-history. In addition, the paper-historical writings published by Budka have not fully been exploited yet. To this end I prepared my *Posłowie* ('Afterword'), presenting my comments on the republished works of Budka (pp. 317-352). Such comments were essential in clarifying some matters and in recalling newer publications linked to the topics discussed by Budka. And therefore my comments are dedicated to different topics, not only on paper-history in Poland, because Budka in his papers and reviews discussed various paper-historical matters. Foreigners may perceive this fact in the quotations of so many articles and books both in Budka's works & reviews and in my 'Afterword' as well. First and foremost, however, the publishing of the paper-historical works by Budka, and my 'Afterword' too, are both aimed at reviving interest in such traditional investigations into domestic paper-history, i.e. a constant trawl for information in archives and research done in terms of bibliology, as fruitfully developed by Włodzimierz Budka and his wife Zofia.

To these comments on the 'Anthology', prepared for foreigners not knowing Polish, I am below adding translations of the captions to photos and figures present in my 'Afterword':

*Page 318, Photo 1:* Zofia Kozłowska-Budkowa at the decline of her life. Photo taken from the article by Bożena Wyrozumska: 'Zofia Kozłowska-Budkowa (1893-1986)'; published in 'The Golden Book of the Historical Faculty of Jagiellonian University' (in Polish), Julian Dybiec, ed., Krakow 2000, pp. 341-345. Reproduced with kind permission from Jagiellonian Library.



*Page 319, Photo 2:* A couple of our heroes on the common photograph under the inscription ‘Polish Travellers’ (a). On its back side the description survived (b) probably introduced by Dr Maria Kowalczyk of the Manuscript Department, who in 1968 presented this photograph to Jagiellonian Library. [The inscription sounds in English: *Prof. Zofia Kozłowska-Budkowa with her husband Włodzimierz – summer 1967.* - JD]. This photograph from the Department of Graphic and Cartographic Collections is reproduced with kind permission from Jagiellonian Library.

*Page 324, Fig. 1:* Three watermarks of the Nysa/Neisse papermill, two of them are published after A. Mareş (cf. note 42, watermarks numbered 1631 and 1632, both of 1553), and the third one after Labarre (cf. note 41, watermark No. 590 of 1614). The watermarks were reduced in the same degree; in their original size the distance from highest point to lowest one is as follows: **No. 1631** – 115 mm, **No. 1632** – 117 mm, and **No. 590** – 58 mm.

*Page 334, Photo 3:* Photo of the commemorative tablet (cf. note 123) funded from contributions of the papermakers participating in the 1946 convention at Jelenia Góra.

[The tablet informs in Polish: *In 1546 King Sigismund the Old confirmed the statute of the guild of papermakers – In 1946 the Association of Engineers and Technicians of Paper Industry was established. — Participants of the second convention at Jelenia Góra [...].* Before 1945 Jelenia Góra was known as Hirschberg. An initial name of our association was different, in shortening: SITPP. Since 1992 its name is: Association of Polish Papermakers (SPP). – JD]

*Page 335, Fig. 2:* The view of the town of Neudamm (now Dębno) in the 1620s, which has been elaborated by Matthäus Merian, with the distinctive building of the papermill (D=Die Pappier Mühle); cf. note 137. [A digital version of the copperplate by Merian has kindly been conveyed to me by Prof. Jan Harasimowicz of the Wrocław University; cf. note 137. - JD]

*Page 338, Photo 4:* Photograph (reduced) of the look-through of a fragment of the paper sheet from the Prądnik Czerwony mill (the paper sample dated about 1510) taken by the author with the digital camera under domestic conditions. In its original size the watermark is 99 mm high in its central part.

*Page 339, Photo 5:* Entries into the visitors’ book of Pulp and Paper Research Institute (ICP) made by participants of the conference dedicated to paper-history, organised by SITPP at ICP in Łódź.

[This photo is shown together with my comments on Budka’s paper published in 1960 and republished (p. 185) in the ‘Anthology’. Its title sounds in English: ‘Two conferences on research into paper-history and watermarks’. In this paper Budka discussed two conferences held in 1959: in Łódź (PL) dedicated to consolidation of domestic paper-historical activities; at Bamberg (D) establishing IPH. Twelve persons participated in each conference. - JD]

*Page 340, Photo 6:* Photographs taken in September 2005 by the author, showing ruins of the papermill in Hamernia (a) and the tablet with their description (b).

[The description of the ruins is also in English; however, in English it should be written: *in Hamernia*, not: *in Hamerni*. In addition, the term ‘Estate’ is incorrectly used to denote ‘Ordynacja Zamoyska’. It should be translated as: ‘Zamoyska Entail’, which was owned by the Zamoyski family of the Polish aristocracy. In this entail many estates were combined together into one very large territory having its own regulations approved by the owners. In the city of Zamość, a capital of the entail, a higher school (Academy) was active. Papers manufactured in the Hamernia mill were used in the Zamoyska Entail and in the Academy; however, they were most broadly propagated in the publications printed in Jozefów, as that Jewish printing house (supported by the authorities of the Zamoyska Entail) was well-known far outside Poland. Georg Eineder wrongly wrote ‘Mamernia’ not ‘Hamernia’ in his 1960 account, and this author located the mill in an incorrect place on his map. - JD]

*Page 345, Fig. 3:* Watermarks of the Wrocław/Breslau papermill (with the bull’s head) published after Tromonin: No. 620 & No. 721 (both of 1475) and No. 1280 (of 1538). In their original size distances from highest point to lowest one are such as: in No. 620 – 125 mm, in No. 721 – 130 mm, and in No. 1280 – 114 mm.

Every remark on the ‘Anthology’ sent to my email address would be gratefully welcomed.



## 31st Congress of IPH: Basel and the Upper Rhine Region 17th to 19th September, 2012

**Main topic:** Cultural and economical evolution of the trinational Upper Rhine Region, especially its history of paper and printing

**Congress centre:** Beuggen Castle, on the Rhine near Rheinfelden (Germany)

### Program:

September 16th (Sunday): arrival

September 17th (Monday): opening, visits of sites in Baden-Württemberg (Germany)

September 18th (Tuesday): Basel (Basel Papermill reopened)

September 19th (Wednesday): visits of sites in Alsace (France)

September 20th (Thursday): departure

## 31. IPH-Kongress: Basel und die Oberrhein-Region 17. bis 19. September 2012

**Thema:** Die kulturelle und wirtschaftliche Entwicklung der Dreiland-Region Oberrhein, speziell deren Papier- und Druckgeschichte

**Kongresszentrum:** Schloss Beuggen, am Rhein bei Rheinfelden (Deutschland)

### Programm:

16. September (Sonntag): Anreise

17. September (Montag): Eröffnung; Besichtigungen in Baden-Württemberg (Deutschland)

18. September (Dienstag): Basel (wiedereröffnete Basler Papiermühle)

19. September (Mittwoch): Besichtigungen im Elsass (Frankreich)

20. September (Donnerstag): Abreise

## 31e Congrès IPH: Bâle et la région du Haut-Rhin 17 au 19 septembre, 2012

**Thème du Congrès:** L'évolution culturelle et économique de la région trinationale du Haut-Rhin; son histoire du papier et de l'imprimerie

**Centre du Congrès:** le Château de Beuggen, sur le Rhin près de Rheinfelden (Allemagne)

### Programme:

16 septembre (dimanche): arrivée

17 septembre (lundi): ouverture, visites en Baden-Württemberg (Allemagne)

18 septembre (mardi): Bâle (Moulin à papier: musée réouvert)

19 septembre (mercredi): visites en Alsace (France)

20 septembre (jeudi): départ

## The Chinese Documentary Film Crew in Fabriano

Giorgio Pellegrini, [info@museodellacarta.com](mailto:info@museodellacarta.com)

The producer Rene Seegers, a native of Holland currently living in Beijing was enlisted to direct this portion of the film at the last minute. Because of unresolved visa issues for the Chinese crew that could not be settled even after many months, Rene gamely stepped in. He arrived in Fabriano after flying from Beijing and assembling a talented film crew from Rome (Giovanni and Nello). Monday evening the four of us got acquainted over a lovely, really exquisite dinner at a local trattoria. Rene was trying to assemble in his mind a plan for shooting the various scenes in Fabriano. The crew was all new to the world of papermaking.

Necessarily the documentary was shot out of chronological/historical order, so it will be very intriguing to see the final version that airs on Chinese broadcast television. Rene has promised me a copy of the film even though it will be in Chinese – I am quite sure the images will tell a wonderful story.

I was able to assist in contextualizing some of the location shooting for the producer/director in hopes he could craft a coherent story about Fabriano's historic and on-going importance in papermaking in the west.

Our shooting locations included the Istituto Tecnico Industriale "Aristide Merioni", where we observed sharp and engaged high school students who are learning the history, chemistry, artistry and production of papermaking. The school offers a unique program which combines teaching the artistic, technical and scientific know-how to these young people who will carry the century-old tradition into the 21st century. The young students seem to grasp the significance and beauty of the ancient traditions and will hopefully have the vision to carry it forward in our fast-paced digital world. They seem well-equipped to do so – both by the training from their hardworking professors and by their youthful enthusiasm and energy.

The Museo Della Carta e Della Filigrana, Fabriano was a fantastic location shoot for most other aspects of contributions since medieval times that Fabriano has played in the story of papermaking as well as fine paper's current manifestations and value.

Within the museum, Rene and his team shot footage in the reconstructed gualchiera (paper production line) as well as the master papermakers who work within the walls of the ex-convent. There was a good opportunity to interview Mr. Franco Librari, the last person (other than his daughter Annarita) to practice the miraculous and intricate chiaroscuro watermark technique which starts with a thin sheet of beeswax and results in a minor miracle in paper – a chiaroscuro watermark of such subtlety and detail it takes 60 working days for Mr. Librari to produce one image.

The crew also interviewed the esteemed and knowledgeable professor Franco Mariani who was able to contextualize and clearly explain the significance of the three major contributions that Fabrianese papermakers have contributed to Western papermaking. Also, professor Mariani linked Fabriano's history and ongoing importance to contemporary papermaking – notably the prosperous Miliani Paper company, well known for its high-quality and sought-after Fabriano artist's paper as well as producing all the bank notes for the Italian state.

One wonderful shooting location was the "old" Miliani paper mill, on the river, which no longer functions as a mill but houses the offices and archives of the 200-year old Miliani Company. The mill is complete with an elevated stature of Christ to bless the incoming workers and the ever-present, rushing river running under the century-old mill complex.

The final shooting location was the studio and enterprise of Sandro Tiberi, who, working with a master papermaker, and his own considerable experience and vision has created a traditionally based yet very forward-looking workshop. He produces exquisite hand made paper and water marked paper, books and other products while seeking to work in collaboration with contemporary artisans and book makers who wish to combine high quality materials with a markedly contemporary vision.

There is such a confluence of tradition and careful artistic skill along with a contemporary vision and appreciation for exquisite paper and products in Fabriano – the film crew and producer will have quite a time weaving together the fine filaments of the story to add to the larger cloth of the documentary history of papermaking from China, Japan, Korea, Samarkand and Fabriano – a fascinating story about a seemingly humble material that is used and valued worldwide in our contemporary times.



## Fabriano paper

Franco Mariani, [franco.mariani@yahoo.it](mailto:franco.mariani@yahoo.it)

Almost always if someone mentions Fabriano their first thought goes to paper; there a sort of a mathematical equation between this town and paper. According to the deeds the most ancient Italian paper mills came into operation in the first half of the 13th century near Genoa (1235) and near Milan (1255). The first Deed concerning Fabriano is dated 1283. In fact, we do not know if paper was already made in Fabriano before this date but we are sure that only fifty years later the paper of Fabriano was well known and appreciated all over Italy and in Europe too.

### The question is - why was Fabriano paper so successful?

Certainly it can be ascribed to at least three factors:

- the use of nails in the stamping hammers (previously wooden hammers were used);
- the use of animal gelatine, instead of starch, for sizing;
- the use of a personal sign, the watermark, that certified the origin of the sheets, just like an actual trade mark.

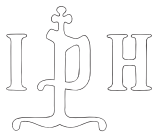
The use of nails in the heads of hammers resulted in more delicate breakdown into fiber of the rags, flax and hemp allowing for a more homogeneous paper pulp. The use of gelatine instead of starch

for the sizing avoided the proliferation of bacterial molds and the resulting deterioration of the paper. In the hot, dry climates of the Arab countries and the south of Spain, starch sizing did not produce this negative side effect, but in our territories, a humid and temperate climate, the starches change causing a progressive destruction of the paper. The watermark perhaps was an “invention,” the result of an accident, probably the breakage of the wire (laid lines) on the paper mould, which left a visible mark on the paper, a visible transparency. The damage was transformed into an opportunity: to mark the sheets with a personal sign, making it possible to identify the papermaker or the mill that had produced that paper. Since there were merchants who sold the paper in the main Italian markets (Perugia, Florence, Bologna...) the watermark, which began as a trademark, became a mark of quality, thanks to the superior characteristics of Fabriano paper. The first signs were very simple watermarks (cross, circle or sideways eight) or common objects (scissors, axe, flowers). Over time the designs became more complex; each papermaker and mill had its own watermark. As the number of designs increased, the watermarks became more complicated and articulated.

But towards the end of the fourteenth century, the watermark was no longer the mark of an exclusive dealer or paper mill; the prevalence of paper mills in Italy (often run by Fabrianese papermakers)

caused the proliferation of watermarks everywhere, although some are specific to certain areas.

In reality, there was a fourth factor, no less important, which is the consequence of the others: the unique Fabrianese way of making paper. The reputation of Fabriano paper spread, so that in 1436 the town council forbade the building of papermaking workshops within a radius of 50 miles and, most importantly, prohibited its citizens from teaching the secrets of the art to anyone living outside the town's territory. In the fourteenth and fifteenth centuries many Fabrianese papermakers were solicited to leave Fabriano and to transfer their know-how in other countries (Venetian Republic, Bologna, southern Italy?). There are a lot of agreements in which is clearly written that the papermaker guaranteed to produce paper *ad usum fabrianensem* that is with the same technique and the same process used in Fabriano. In other words, the canonization and standardisation of the methods to make paper.



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**Turfan Research:** The German Research Foundation has accepted a three years project between Bundesanstalt für Materialforschung und –prüfung BAM in Berlin and Hamburg University of analysis of Turfan pigments, ink and paper. A joint meeting took place in Berlin, and here the result of the first Turfan paper analysis project was presented.

13.04-15.04 2011

### **Care and Conservation of Manuscripts**

The Arnamagnæan Institute, Department of Scandinavian Research, Njalsgade 136, University of Copenhagen  
Email: ami@hum.ku.dk

05/05-07.05 2011

**1. International Congress: Paper as a Ground support in medieval times:** The Protagonism of the Xativa Villa, Valencia, Spain  
Email: rubio\_mongui@gva.es

09.05-11.04 2011

**European Research Centre:** Das Buch in Zentrum Buchstadt Horn  
New Approaches to Book and Paper Conservation-Restoration in Europe in Horn, Austria  
Email: ercbookpaper@gmail.com

06.06-07.06 2011

**IADA seminar:**  
Water and Paper, Conservation Principles  
Institut für Papierrestaurierung, Vienna  
Email: hombu@freenet.de

08.06.10.06 2011

**Nordic Association of paper Historians NPH:**  
Annual Conference in Oslo, Norway  
Email: tina.poulsen@nasjonalmuseet.no

07.07-09.07 2011

**Asociación Hispánica de Hostoriadores del Papel AHHP:** IX Congreso Nacional de Historia del Papel, Madrid, Spain  
Email: aspapel@aspapel.es

15.09-18.09 2011

**Deutsche Arbeitskreis für Papiergeschichte (DAP):** 20. Annual meeting in Mecklenburg-Vorpommern, Germany  
Email: graf.moltke@gmx.de

19.09-23.09 2011

**The ICOM-CC 16th Triennial Conference** in Lisbon  
Conference theme: Cultural Heritage/Cultural Identity - The Role of Conservation  
[http:// www.icom-cc2011.org](http://www.icom-cc2011.org)

23.09-25.09 2011

**British Association for paper historians BAPH:** 22<sup>nd</sup>. Annual Conference in Canterbury, United Kingdom  
Email: phil.crockett@btinternet.com

## European Research Centre: courses:

European Research Centre for Book and Paper Conservation-Restoration  
Wiener Strasse 2, 3580 Horn, Austria  
Email: ercbookpaper@gmail.com

31.10-04.11 2011

**Identification of European Paper** – you only see what you know

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Submit your manuscript in a single column using a minimum of formatting, using plain text, RTF or Microsoft Word exported as .doc. or as .rtf. Each page should contain approximately 5300 units (letters without spaces). Do not number sections or paragraphs

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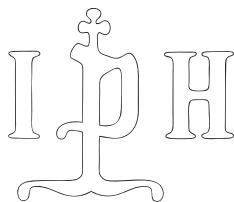
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