The Digital future for Documentary Studies

With this newsletter and the new academic term CSAD enters its second year. There is much to report on. The strengths and orientation of the Centre’s work are now well defined. Electronic projects are central to our activities. In the last newsletter, Dorothy Thompson wrote that she had seen the future and that, for documentary studies, at least a part of that future seems to be digital. In this Newsletter we have further evidence in support of this proposition, with reports on the digitisation of the Vindolanda tablets and on a symposium at the Centre in which the digital future for documentary studies—its limits as well as its advantages—was specifically addressed. Digital technologies can help us to see more clearly at the margins of our studies and to share our resources and communicate our results more widely and efficiently. They enable, but do not replace scholarship.

Digitising the Vindolanda Tablets

The week of 23 to 27 September was a busy one for the Centre, the British Museum’s Department of Prehistoric and Romano-British Antiquities and Dr. David Cooper of Oxford University’s Celtic Manuscripts Project. Taking advantage of a week’s pause in work on the digitisation of manuscripts in the Bodleian Library’s collection, Dr. Cooper drove the project’s Kontron camera down the motorway to Bloomsbury where it was to be used to begin an intensive and ambitious project to digitise the ink writing-tablets from the Roman fort of Vindolanda, near Hadrian’s Wall (see Newsletter No.2, p.3). Preliminary experiments had already taken place in Oxford, using a writing-tablet of an identical type from Carlisle, made available by Dr. Roger Tomlin. A format and a calibration (715 nm in the infra-red spectrum) for the camera had earlier been established in London using the British Library’s Kontron camera under the expert guidance of Tony Parker and Dave French.

When work began on Monday morning, a production line was rapidly established: a team of three BM staff removed the tablets from their protective mounts and reassembled them with captions and scales for photography. Images were taken at a standard resolution of 480 dpi which allowed even the largest tablets to be captured within a single frame and the same setting to be reused with only minor adjustments from one tablet to the next. Each captured image was then cropped down and saved to disk while the next tablet was being prepared. By the end of the week, the routine and repetitiveness of the work had left everyone rather dazed, but the results justified our exhaustion. The whole of the unpublished trove of writing-tablets from the excavations of the 1990s had been captured on disk, together with a sample of the earlier material from the 1980s, published by A.K.
Bowman and J.D. Thomas in 1993. It took five people, working from 10 till 5 each day for a week to complete over 500 scans. Eventually, we hope to scan all of the tablets discovered between 1974 and 1994.

We were also able to add scans of a dozen stilus tablets, photographed under variable raking light for the Centre’s joint project with the Department of Engineering Science (Prof. J.M. Brady and Li Fu-Xing) on the image-enhancement of incised texts.

The digitised images of the new and unpublished ink tablets of the 1990s will be used by Dr. Bowman and Prof. Thomas in the editing work currently under way. They complement the brilliant infra-red photographs already taken at Vindolanda by Alison Rutherford and are the more vital because development plans at the BM threaten to make the originals less accessible over the next few years. Preliminary comparison of the new and the old images shows the relative strengths of conventional and digital photography. The strong contrasts and clear lines yielded by the former are hard to match, but the ability of the digitised images to be viewed across a range of contrast settings with variable magnification on a computer monitor offers important advantages for the process of decipherment—in particular, in distinguishing between ink and other extraneous marks.

Digital images have a vital role to play in the future of documentary studies. Not the least of their advantages is the accessibility they offer for material such as the finds from Vindolanda. We now have the possibility to create files consisting of images of the original tablets and scans of the infra-red photographs, along with transcriptions of the texts, commentaries and other scholarly apparatus. Such developments fit very well into wider current strategies for the electronic dissemination of scholarly material (e.g., through the Arts and Humanities Data Service).

We are very grateful to Dr. Cooper, Tony Parker and Dave French and to Dr. T.W. Potter and his staff at the British Museum for their investment of time, expertise and enthusiasm in this project.

**Imaging Documents: A Symposium**

On Friday 31 May and Saturday 1 June, a small group of scholars involved in a wide variety of imaging projects concerned with ancient and medieval documents met at the Centre to review shared interests. The participants were:

Prof. R.S. Bagnall (Columbia University and Christ Church), Dr. A.K. Bowman (Christ Church, Oxford), Prof. J.M. Brady (Dept. of Engineering Science, Oxford University), Mr. L.D. Burnard (OUCS), Dr. Rosalie Cook (Macquarie University, NSW), Dr. D.G. Cooper (Libraries Automation Services, Oxford University), Dr. C.V. Crowther (CSAD, Oxford University), Prof. Marilyn Deegan (IIELR, De Montfort University), Prof. T. Gagos (University of Michigan and British Academy Visiting Fellow, CSAD), Dr. R. Kilpatrick (King’s College, London), Dr. G. Lock (Institute of Archaeology, Oxford University), Dr. D. Obbink (Christ Church, Oxford), Mr. A. Prescott (British Library), Dr. P. Robinson (IIELR, De Montfort University), Dr. S. Ross (The British Academy), Mr. H. Short (King’s College, London), Dr. R.S.O. Tomlin (Wolfson College, Oxford), Dr. H. Walda (King’s College, London)

Papers were presented on the following topics:

- Imaging Greek papyri: the APIS Project. (Roger Bagnall, Traianos Gagos)
- Imaging carbonised papyri. (Dirk Obbink)
- Imaging Medieval documents. (Andrew Prescott, David Cooper, Peter Robinson)
- The Daedalus Project. (Harold Short, Hafed Walda, Robin Kilpatrick)
- Imaging inscriptions. (Charles Crowther)
- Wooden stilus tablets and lead curse tablets. (Alan Bowman, Mike Brady, Roger Tomlin.)

Round Table discussion. Chair: Marilyn Deegan

*Marilyn Deegan* of the International Institute for Electronic Library Research reports below on the discussions:

*Example of a digital image of a manuscript captured with a Kontron camera from the Celtic Manuscripts Project: Oxford, Bodl. Lib., MS Rawl. B. 506, fol. 2r (detail), reproduced by permission of the Bodleian Library.*
The idea of this workshop grew out of the interests of the two institutional bases which organised it: the Centre for the Study of Ancient Documents (CSAD) at Oxford University which is using and pioneering digital techniques for the study of ancient documents, and the International Institute for Electronic Library Research (IIELR) at De Montfort University which is carrying out research into the technologies and intellectual foundations necessary for the development and delivery of the digital library to scholars and students. It was felt that a meeting which transcended discipline boundaries would be an excellent way of keeping abreast of developments across a broad range of technological and intellectual concerns. We were interested not just in the representation of text electronically, but in a number of projects which had as their aims the creation, display, and enhancement of images of text and artefacts written on or carved from a wide variety of materials: ink on paper, parchment, or papyrus; inscribed materials on stone or the secondary images of these impressed on paper—so-called squeezes—incisions on wax, wood, or lead, stone sculpture; and the digital representation of what are already secondary images: photographs and microfilm. The materials under discussion dated from the seventh century BC to the nineteenth century AD, and many had suffered varying degrees of damage or wear throughout their long history, having been burnt, carbonised, scraped, torn, cut, folded, excised, worn, discoloured, damaged by water or chemicals, and sometimes even affected by the attempts of past scholars and librarians to read them using processes which have lost for us forever some of the vital information encoded on the artefacts. The papers presented at the symposium discussed most of the above kinds of materials and the practical problems involved in handling the objects and the different methods of rendering these into some kind of digital representation. A key question asked was, having produced a digital form of the document, do we then know more than we knew before? Can digitisation enhance readings and find us new information? In some cases it seems that it can: the Beowulf Project at the British Library, for instance, has revealed readings in the manuscript of the poem which have been inaccessible in the past. But this, though important, was not felt to be the only, or even the main reason for digitising these materials. The enhancement of scholarly access to widely dispersed materials which can be brought together virtually for world-wide distribution and use was felt to be of inestimable benefit to scholarly exchange. Another key issue was the use of the digital form as a means of preservation: with a fragile and rapidly deteriorating original, the digital version, if an adequate substitute for the original for most scholarly purposes, can allow access to the actual physical object to be restricted. With some materials, the object may not survive for much longer, and the digitised image may be all that we are left with. While not a perfect situation, this is preferable to total loss of our intellectual history. Of course, this throws up new problems of preservation: how, in a rapidly changing world of technology, are we to preserve the digital forms themselves?

The workshop was an exciting meeting of groups of scholars interacting across discipline boundaries and discussing new opportunities offered by new technologies. The papers and discussions are to be published shortly in the Office for Humanities Communication Publication Series and the volume will be advertised in this newsletter.
Education and Reading in Graeco-Roman Egypt

A one-day workshop was held at the Centre on 7 June to discuss aspects of education and reading in Graeco-Roman Egypt. The conference was jointly organised by the Centre’s Honorary Visiting Fellow, Prof. R.S. Bagnall, and by the Director, Dr. A.K. Bowman. Short papers were offered by Dr. Raffaella Cribiore (Columbia University), Dr. Teresa Morgan (St John’s College, Cambridge), Mr. S. Bucking (Trinity College Cambridge), and Ms. Daniela Colomo (St. John’s College).

Among the highlights of the Workshop was a preview presented by Dr. K.A. Worp of the University of Amsterdam of a new literary papyrus from the Dakleh Oasis preserving part of an oration by Isokrates. Dr. Cribiore has provided a summary of her paper for the Newsletter:

Letter Writing in the Schools

We do not know to what extent learning to write epistles was part of the school curriculum in Graeco-Roman Egypt. Handbooks of model letters used in the training of professional letter writers existed, as two collections, the Typoi Epistolikoi of Pseudo-Demetrius and the Epistolimaioi Charakteres of Pseudo-Libanius, testify. Another collection, P. Bon. 5, was found in Egypt. It was probably meant for professional writers or students who were trained in chancery or business schools. Another papyrus, P. Par. 63, evokes a similar scenario of professional education. In rhetorical schools letter writing seems to have remained on the fringe of formal instruction. The evidence from Graeco-Roman Egypt is not completely clear. Thus, for instance, O. Edfu II 306 contains a letter that could be a progymnasma based on the novel of Ninus.

Among the Greek school exercises only an early Byzantine example, MPER NS XV 73, shows a beginner copying the initial part of a letter to a brother. It is striking to observe that in schools that taught Coptic beginners who were learning to write were often required to practise epistolary formulaic expressions in their writing exercises. This practice testifies to a practical aspect of Coptic education, where the teaching of literacy addressed more immediate needs. When students were away at school, they often corresponded with their families back home, as P. Oxy. III 531 and P. Oxy. VI 930 testify. In the Philogelos, a collection of ancient anecdotes dated to the late Roman period, two anecdotes, 54 and 55, speak of students away at school writing to their fathers. Letters served to maintain some contact between members of a family who were separated. It also seems that students away at school were expected to write to their families to demonstrate the results of the education they were receiving. Is it possible that some of the letters written home by students might be school exercises and genuine epistles at the same time? The student Aurelius Dios reassures his father about his own learning in P. Oxy. X 1296. In SB III 6262 Thonis writes to his father Arion urging him to come to visit, to see whether or not his son’s new teacher pays attention to Thonis. In P. Oxy. XVIII 2190, Neilos writes to his father to provide him with a good overview of the state of his education. Another letter, P. Ryl. IV 624, also seems to have been conceived in school, and has the precise aim of filling a father with pride and showing him that he is spending his money well. A Byzantine letter written by a father to a teacher, SB V 7655, may provide the missing link to show that teachers were somehow involved in the correspondence of students with their parents.

CSAD News and Activities

Imaging Project

The Centre’s project to create an archive of digitised images of its squeeze collection has completed its first year. Over 100 images are currently available from the Centre’s WWW site (http://info.ox.ac.uk/~csadinfo/Images.html) out of a total of 1,000 images created during the year. The number of images available should increase rapidly during the course of 1996/7 as more on-line capacity becomes available (see WWW Site story below).

Much has been learnt during the year. The process of image capture and creation has been streamlined and harmonised. The initial A4-sized images made with the Centre’s flatbed scanner at a resolution of 300 dpi are stored as uncompressed TIFF files. These files are then either cropped, in the case of small squeezes, or, for larger squeezes, composited to form images of the whole inscription. Corrections are made for orientation and scales and captions are added. The completed image is stored as a 300 dpi file from which smaller 150 and 72 dpi JPEG images suitable for publication on the WWW are derived. 72 dpi images are standardly passed through the Unsharp Mask filter in Adobe Photoshop to ensure crispness of detail. Details of the process of image capture are recorded in a separate database. Samples of this information will eventually be made available with each image.
The problem of storing the large volume of image data generated by the project has been solved by the commissioning of the University’s Hierarchical File Server, as reported in Newsletter no. 2. Copyright issues have also had to be confronted. Images in the database will eventually all carry a digital watermark identifying the Centre’s copyright, although it is intended that they should remain freely available for scholarly purposes. The project is now showing signs of fulfilling some of the promise with which it was undertaken—of making more widely and immediately available to scholars basic resources for carrying out independent epigraphical work. The availability of digital images of squeezes—or, at least, the possibility of rapidly creating them—has opened up the Centre’s squeeze collection to a much wider audience. Requests from graduate students in the USA and Australia, for example, have been answered in the past month by the creation and electronic transfer of digital images.

A Digital Epigraphical Sourcebook
Excellent selections of Greek historical inscriptions are currently available in standard compilations such as Meiggs and Lewis’s *Greek Historical Inscriptions* and Pouilloux’s *Choix d’inscriptions grecques* or Moretti’s *Iscrizioni storiche ellenistiche*. Illustration of the texts collected in these volumes, however, is necessarily either very limited or entirely absent. One way in which the Centre’s imaging project is to be extended over the coming year is to make available digitised images of as many texts in these collections as possible. The Centre will also be experimenting during 1996/97 with possible formats for an on-line epigraphical sourcebook integrating text, translation, image and a hypertextual genetic lemma. The aim of this project would be to provide a resource that could be used at a range of different levels—from reading a translation to exploring the different layers in the construction of the text itself.

Digitising a Lycopolite Census: An Update
Dr. Willy Clarysse and Dr. Dorothy Thompson returned to the Centre at the beginning of August with Prof. John Tait of University College London for a rendezvous with the Centre’s digital camera and two fragments of a Petrie papyrus (Dublin C. 14 and E. 43) brought over from the library of Trinity College Dublin by Stuart O’Seanoir. The opportunity was also taken to re-photograph both sides of the Lycopolite census document discussed in the last newsletter which Prof. Tait had brought up from London. A strong infra-red filter brought out tantalising traces of writing on the reverse side of the papyrus, but insufficient to provide a continuous text. The limits of digital photography were also encountered with the Dublin text, as Dorothy Thompson reports: “We had hoped that more would become legible, but I think the figure that we were able to read for the salt-tax dues for the capital of the Arsinoite nome is very exciting. It means we can get at the adult population figures which have been hypothetical up to now. It also shows that Ptolemaic nome capitals were not as important (or certainly not as large) as later under the Romans.”

WWW Site
The Centre’s WWW site is about to move from the University’s computers to a dedicated Internet server, although the current URL [http://info.ox.ac.uk/~csadinfo](http://info.ox.ac.uk/~csadinfo) will continue to provide a jumping-off point. The new server will enable a much larger and more varied range of material from the Centre’s resources to be brought on-line—including a selection of the published Vindolanda tablets photographed in London at the end of September. It is also intended that texts and translation should eventually be made available to complement the images.

*Scanned image of a squeeze of an inscription from Chios recording the sale of a priesthood, deposited in the Centre by Prof. W.G. Forrest (Plaßart & Picard, BCH 37 (1913), 224-228, no. 31)*

*“Ancient Documents Old and New”*
The Centre’s seminar series continued in Trinity Term 1996 with four papers on a range of documentary subjects. The first three seminars were held in the Centre, but Professor Gagos’s lecture was moved to the Garden Auditorium at St. John’s College to make it accessible to a larger audience. Summaries of all the papers appear on pages 6 and 7 below.
Around OGIS 219
(John Ma, 25 April)
John Ma of All Souls College began the Trinity seminar series with a paper examining the text, dating and interpretation of OGIS 219, a much-discussed decree of Ilion for a King Antiochos. The paper started from the discovery of the inscription at Skepsis and its removal to Cambridge by Lady Mary Montagu. Discussion of this important third-century text in the past has centred on the question of which Antiochos—whether Antiochos I or Antiochos III—it refers to. Palaeographical and historical arguments for and against both possibilities were reviewed. The balance of probability can be weighed in favour of either option, but the question is unlikely to be settled without fresh evidence. Whether or not this crux is resolved, the formulation and texture of the decree has much to tell us about the relationship between city and king in the Hellenistic period.
The paper concluded with a discussion of a tantalising fragment of a Hellenistic historical text of analogous content (P.Berol. 21286), for which possible corrections and supplements were proposed, and a further proposed correction to the conclusion of OGIS 219 itself.

An Agricultural Account Book from the Dakleh Oasis
(Roger Bagnall, 9 May)
Professor Roger Bagnall, Honorary Visiting Fellow at the Centre in 1995/6, presented a remarkable document from the Western Desert of Egypt, which he has been editing during his year in Oxford. It was discovered in the excavations at Ismant el-Kharab (ancient Kellis), in the Dakhleh Oasis, a site which has yielded exceptionally interesting documents, including Manichaean texts and part of a speech of Isokrates. Professor Bagnall’s text is a codex of 8 wooden tablets. The text runs to over 1700 lines and is the most extensive and best-preserved set of accounts for an agricultural entity that has survived from the fourth century AD. It reveals an extensive range of activities, commodities and payments and contains invaluable evidence for the economic and agrarian history of Egypt in the fourth century.

Apion II and Apa Hierax: A New Land Settlement Document
(John Rea, 23 May)
Another aspect of the agrarian history of Byzantine Egypt was illuminated in a seminar by Dr. John Rea, who retired from his post as University Lecturer in Documentary Papyrology at the end of the academic year 1995/6. Dr. Rea described a sixth-century papyrus, to be published in vol. LXIII of The Oxyrhynchus Papyri. The text runs to 250 lines and describes the settlement of claims over a piece of irrigated agricultural land. The history of the dispute over the piece of land, which had been mortgaged by its owner and then used as security for a cash loan, is particularly interesting because it involves a monastery of Abbas Hierax and members of a wealthy and powerful Oxyrhynchite family, the Apiones, whose extensive estates are very well-documented by the papyri over several generations.
“Rolling Stones”: Economy, Society and Culture in Late Byzantine Petra (Traianos Gagos, 6 June)

During the past decade the world of papyrology, keeping abreast of developments in modern technology, has undergone a methodological revolution by converting its major research tools into electronic form. This revolution continues today with efforts from papyrological collections to make their holdings available over the World Wide Web.

However, despite this major leap forward, the world of papyrology continues to face new challenges for which these sophisticated research tools can offer only limited help. The most recent challenge is the discovery of 151 rolls of carbonized papyri in a room adjacent to a Byzantine Church in Petra, Jordan. The state of preservation of the papyri, as might be expected, is very poor. The Finnish team under the leadership of Jaakko Frózen that undertook responsibility for their conservation managed to do the admirable work of a magician in less than 9 months.

The discovery of these documents has important repercussions for the cultural orientation of the field of papyrology. As has been stressed by other scholars, the Petra papyri, along with other previous discoveries, justifiably call for the creation of a papyrology of the Near East. The fact that the papyri provide information for the society, economy, and culture of Petra in the Byzantine period is at the same time a boon for the history of the city and its environs, which was virtually non-existent in the past, but also a challenge to “egyptianizing” papyrologists.

The rolls form a private archive and range in date from around the mid 520s to the mid 580s—far beyond the mark of 551 A.D. which archaeologists had taken to be the time of the final demise of Petra caused by an earthquake. The documents were written for the most part in transversa charta and record property transactions among family member and/or outsiders that deal with acquisition, disposition and settlements of disputes. The last owner of the archive—who is also the central figure—was Theodoros, son of Obodianos, who was a deacon and then archdeacon, in all likelihood, of the church where the papyri were found. Around 537 he was married to Stephanous, daughter of Patrophilos, son of Bassus.

The archive gives a rather one-sided view of Petra in the sixth century (that of a member of the upper class of landowners), but it provides raw material for the study of the culture, the economy, and the society of Petra and its hinterland only a few years before the Islamic conquest. Although the language of the papyri is Greek, the names of fields and houses (and occasionally persons) show clearly the Nabatean background of the city and its interaction with the growing arabic influence in the region. Known once as a major city whose economy depended heavily on trade, the new archive seems to suggest that the economy of the city might have shifted towards agriculture sometime between the third and the sixth century.

The final publication of the entire archive is expected to take place in the year 2000. The publication has been assigned jointly to a Finnish team under the direction of Jaakko Frózen and an American team under the direction of Ludwig Koenen. T. Gagos has participated in the last two seasons (1995 and 1996) and is expected to continue work until the final publication.

Lewis Memorial Fund and Lecture

The first Lewis Memorial Lecture was given by Professor M. Jameson of Stanford University on May 29, 1996 in the garden Auditorium, St. John’s College, with the title “The Rituals of Athena Polias in Athens”. Prof. Jameson’s lecture shed fascinating light on the interpretation of the Parthenon Frieze. Among a large audience were members of Professor Lewis’s family. The lecture was followed by a reception in St. John’s College.

The Lewis Lecturer for 1997 will be announced shortly.

International Summer School in Papyrology 1997

A Summer School in Papyrology will be held at the Centre during the first half of July 1997, introducing students at any stage to all aspects of papyrological research. The Summer School will offer many opportunities to younger scholars, from working with papyrologists in a seminar format to editing a papyrus from the Oxyrhynchus collection. The number of participants will be limited to 20. Application materials are available from Dr D. Obbink, Christ Church, Oxford OX1 1DP, U.K. Fax: +44 1865 794199. E-mail: dirk.obbink@christ-church.ox.ac.uk.
1996/97 Seminar Programme

Michaelmas Term 1996
The Centre’s regular seminar series on documentary subjects, continues in Michaelmas Term 1996 with four seminars, for which the programme is as follows:
16 October: Dr. M. Brosius, “Accounting in the Persepolis Fortification Tablets”
30 October: Dr. N. Gonis, “Roman duces in Egypt: some new evidence”
13 November: Dr. H.S. Kim, “How to make good use of money. Uses for small change”
27 November: Dr. E. Matthews, “From inscription to onomasticion: the Bouthrots manumission texts and LGPN”
Meetings will be held in the Centre on alternate Wednesdays at 5.00 p.m.

Hilary and Trinity Terms 1997
The seminar series will be resumed after a break in Hilary (January-March) 1997, with a further four papers on alternate Wednesdays in Trinity (April-June) 1997. Details of these will be announced in the next newsletter.

Visiting Scholars
Prof. R.S. Bagnall of Columbia University, the Centre’s first Honorary Visiting Fellow, completed his year in Oxford in July. During his stay he worked on the publication of new papyri from the Dakleh Oasis, one of which provided the subject for a seminar in Trinity term. Professor Bagnall also participated in two workshops at the Centre, on Education in Egypt and on the Digitisation of Ancient Documents.
Prof. Traianos Gagos of the University of Michigan held a British Academy Visiting Research Fellowship at the Centre in May and June. During his stay Prof. Gagos gave a lecture on his current work at Petra and was able to complete editorial work on a Festschrift for Prof. Koenen. He also provided much valuable advice about the Centre’s digitisation projects based on his own initiatives at Michigan.
Prof. Wolfgang Blümel of Cologne University spent a week at the Centre at the beginning of July working on new corpora of inscriptions from Priene and Teos. During his stay he also presented some new epigraphical material from Caria to a group of Oxford graduate students. The Centre was visited on 17 June by Prof. John Laver, the Chairman of the Humanities Research Board who was responsible for introducing the Institutional Fellowship programme of which the Centre has been one of the first beneficiaries.
Among other visitors who have made use of the centre’s facilities have been Dr. Paul Schubert (University of Neuchâtel), Dr. Cornelia Römer (Cologne), Dr. Hannah M. Cotton (Hebrew University of Jerusalem) and Dr. Brian McGing (Trinity College Dublin).

Other News
The Director, Dr. A.K. Bowman, will be away on leave in Australia from 20 October to 17 November 1996 as a guest of the Ancient History Documentary Research Centre at Macquarie University.

Dr. N. Gonis, Research Assistant to the Oxyrhynchus Papyri, has been appointed to a Junior Research Fellowship at Wolfson College. His work will be supported over the next three years by a grant from the Leverhulme Trust.

Circulation and Contributions
This is the third newsletter of the Centre for the Study of Ancient Documents. The Newsletter is circulated in Autumn and Spring. The Newsletter invites contributions of news, reports and discussion items from and of interest to scholars working in the fields of the Centre’s activities—epigraphy and papyrology understood in the widest sense. The Newsletter is circulated to individual scholars on the Centre’s mailing list and is also available from the Centre’s WWW site (URL http://info.ox.ac.uk/~csadinfo) in HTML format or for downloading, either as a text file or as an Adobe Acrobat™ PDF file. Contributions, together with other enquiries and requests to be placed on the Centre’s mailing list, should be addressed to the Administrator at the Centre.

Addresses
CSAD
Centre for the Study of Ancient Documents
University of Oxford
67 St. Giles
Oxford OX1 3LU
Tel. and Fax: 01865 288180
E-mail: csadinfo@sable.ox.ac.uk

Director
A.K. Bowman MA PhD FBA
Christ Church
Oxford OX1 1DP
Tel. 01865 276202
E-mail: alan.bowman@christ-church.ox.ac.uk

Administrator
C.V. Crowther MA PhD
Centre for the Study of Ancient Documents
E-mail: charles.crowther@lithum.ox.ac.uk

Management Committee
Prof. P.J. Parsons (Christ Church); Prof. E.M. Steinby (Institute of Archaeology); Dr. B.M. Levick (St. Hilda’s College); Dr. D. Obbink (Christ Church); Prof. R.G. Osborne (Corpus Christi College); Dr. R.S.O. Tomlin (Wolfson College)