

THE HISTORICAL DOCUMENTS AT THE JOHN RYLANDS UNIVERSITY LIBRARY: THE REED DEAD SEA SCROLLS COLLECTION

CORRESPONDENCE

G. J. BROOKE

Department of Religions and
Theology, Faculty of Arts,
University of Manchester,
Oxford Road, M13 9PL, UK

corresponding author:
George.Brooke@manchester.ac.uk

1. Introduction and the Role of Accidents in Creating Research Opportunities

»My mother has some Dead Sea Scrolls in her attic,« came the voice from the audience. With the under-funding of British universities by consecutive governments during the last generation, many, including Manchester have turned to their alumni in search of support, financial and otherwise. The University of Manchester is well known to many for Rutherford and the atom, for Turing and the computer, for Lovell and Jodrell Bank, and not least for Allegro and the Dead Sea Scrolls. And so it was that I was asked to speak at the first University of Manchester Alumni Weekend in 1996 on »Manchester and the Dead Sea Scrolls«. And when the voice came from the audience, »My mother has some Dead Sea Scrolls in her attic«, I knew it did not come from some over-ardent follower of The Holy Blood and the Holy Grail such as commonly appear in the audiences of my popular lectures, but from a trustworthy Manchester graduate: it was in fact the daughter of Ronald and Marion Reed, all three, father, mother and daughter were Manchester graduates.

The Dead Sea Scrolls in the attic turned out to be the majority of the small samples that had been variously sent to Ronald Reed in the 1950s and early 1960s for analysis of several types to do with dating (done through the rates of collagen shrinkage) and manuscript production (undertaken through chemical analysis). For much of his career at the University of Leeds and afterwards Ronald Reed (15 Nov 1919–23 Mar 1990) was one of Britain's foremost leather analysts; many regarded him as the foremost. His time at Leeds (1943–80) seems not always to have been entirely happy; he suffered from the dwindling industrial interest in and support for leather studies at Leeds and his subject specialism was reorganized more than once so that, having started his career there in the Department of Biomolecular Structure in charge of the electron microscope laboratory, he eventually ended up in the University's Department of Food Science. Furthermore, perhaps because of the unfortunate circumstances of reorganization, he never gained the academic seniority and recognition at his University that was his without question on the international scene. But this has resulted in a happy circumstance for us, since he seldom seems to have entrusted the objects of his

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research and teaching to the University departments with which he was associated, but took home what was important to him. Rather than being lost or destroyed in the many departmental reorganizations, some of it ended up in his study, at the side of the house, and some of it in the attic.

Now, when it comes to the Dead Sea Scrolls, the issues surrounding their discovery, purchase, initial sorting and conservation are the stuff of both learned articles¹ and many popular introductions (e.g., Davies, Brooke and Callaway)² and documentaries (e.g., Mayo³). Since 1947 manuscript remains have been discovered at several sites in the Judaean wilderness from Wadi ed-Daliyeh, about halfway between Jericho and Samaria, to Masada in the south; these finds date from the 4th century BCE up to the Islamic period. For most, however, the term Dead Sea Scrolls conjures up the discoveries made between 1947 and 1956 in eleven caves at and near Qumran, on the north-west shore of the Dead Sea. It is now estimated that from those eleven caves the remains of over 900 manuscripts have survived: most are on skin of various kinds, some are on papyrus, and one famous scroll was engraved on three sheets of copper that were riveted together and found in two rolls in Cave 3 in 1952. These manuscripts found at Qumran date variously from the end of the 3rd century BCE to the middle of the 1st century CE. Nearly all the manuscripts contain literary works; only a few preserve documentary texts. Though spread across three centuries and eleven caves, the collection of manuscripts seems to belong together as some kind of library.

Some of these manuscripts were published efficiently and speedily, though often without much attention to their physical properties, attention being given almost exclusively to their textual contents. Others became part of the collection at the Palestine Archaeological Museum in East Jerusalem that were understood to be the preserve of the members of the small team of editors that Père Roland de Vaux established in the light of the large number of fragments from Cave 4 that were purchased from the Bedouin, usually via



Figure 1: Cave 4 in Wadi Qumran where most of the scrolls were found. Photo by E. Pantos.

intermediaries. The enormity of the task and a number of other difficulties resulted in the non-publication of most of these Cave 4 (and Cave 11) fragmentary manuscripts from 1952 until 1992. After twenty-five years of waiting, in 1977 G. Vermes of Oxford famously labelled this »the academic scandal *par excellence* of the twentieth century«⁴; but he had to wait another fifteen years before the images of the manuscripts were generally released and then published in microfiche⁵. Part of the story of the non-publication of many of these fragmentary manuscripts rests in issues of scholarly ownership, intellectual rights and privileged access; almost every scroll has its own story to tell.

2. Ownership and Intellectual Property

When the Reed collection of Dead Sea Scroll fragments came to light, there was immediately a host of questions. Amongst the most problematic issues was that of trying to discern who owned the fragments. When I established contact with Marion Reed, it soon became clear that her late husband had not considered that the University of Leeds had any claim to their ownership, since he had taken them home. The University may have facilitated his collagen research and had some claim on his research output, but it had not been concerned to archive that research. But initial assessments of the collection in 1996 made it almost impossible to discern which fragments originated from where; and indeed it seemed as if some had been given away. Since John Allegro had been the middleman between the Palestine Archaeological Museum »Scrollery« in Jordanian Jerusalem and Ronald Reed, and since the Reed family were all Manchester graduates, in the light of the circumstances surrounding the various collections of Dead Sea Scrolls around the world, it seemed appropriate that these small uninscribed pieces should find their home in Manchester. So, in Manchester for the last ten years they have been stored exactly as Ronald Reed had kept them in his attic while the search has been on for a grant for their cataloguing and conservation; that work has now begun (through the synergy made possible by the interests of the author, S. Butler, J. Hodgson, J. Prag, E. Pantos, I. Rabin, and T. Wess), as part of a very significant pilot project yet to be fully funded, but which is attracting considerable interest.

What of this pilot project in ancient manuscript conservation? First, it is well known that conservators are trained and paid to conserve. Ask a conservator to surrender for interventionist and possibly destructive research purposes part of that with which he or she has been entrusted and watch a lioness protecting her cubs. In the case of the Reed collection of Dead Sea Scroll fragments it

has been clear from the outset that the fragments were variously submitted to Ronald Reed as a scientific research collection. Perhaps most scholars had assumed that the systems of analysis available in the late 1950s and early 1960s would have resulted in the destruction of almost everything that was sent to Leeds not least through its alternating humidification and dehumidification. Nobody seems to have asked for anything back. Few would have guessed that Ronald Reed had taken the material home. The fortuitous rediscovery of the fragments in an attic means that what was from the outset intended as a research collection available for scientific intervention and manipulation can be used once again in the same way and for similar purposes.

With the Reed collection of Dead Sea Scroll fragments the University of Manchester has become the holder of a research collection that can now be reactivated for analysis by synchronronic and other means. The University most surely takes its responsibilities for conservation very seriously, but in this instance it takes them so seriously that those who are responsible for the Reed collection at the John Rylands University Library can see immediately the benefits of releasing the fragments for all manner of scientific analysis once again. As a result the opportunity for a pilot project has arisen that could influence not only how all the Dead Sea Scroll fragments are conserved in the future, but also how all collections of early skin and parchment manuscripts might be best preserved. The nature of the rediscovery of the Reed fragments and their passing to the University of Manchester has created an opportunity for scientific research singularly free of proprietorial claims. Here is a rare opportunity for interdisciplinary and international cooperation, the results of which could be of wide benefit to all skin and

parchment conservators. If the Reed fragments can be recognized as part of a pilot project whose non-commercial results can immediately be put in the public domain to stimulate cooperation between grant-making bodies for enhanced work in similar areas of conservation, then the John Rylands University Library of Manchester will be well pleased, and the decision to locate the Reed collection in Manchester entirely vindicated.

3. Asking the Right Research Questions

Reed's work needs to be revisited with the latest equipment that is available and with a new set of research questions that the most recent investigatory techniques may answer, partially or in full. Those research questions are of three kinds. (a) To begin with there are those questions which might have fresh formulations but which lie in direct continuity with the collagen analyses provided by Reed and his student, John Poole. They were not concerned with the conservation of the materials they were studying, but were attempting to provide an alternative method for dating the manuscripts in the light of the loud voices of the 1950s that were insisting that the scrolls were medieval or modern forgeries. In addition they had been interested in how the skins had been manufactured for writing purposes. Though in general the dating of the scroll fragments from the Qumran caves is no longer an issue⁶, the refinement of existing dating techniques is a desideratum⁷. And any new information on the preparation of the skins as manuscripts can provide fresh perspectives on social history and answer self-evidently significant questions concerning the provenance of their production. Collagen analysis can now be undertaken with other purposes in mind as well, purposes more overtly related to conservation matters.

(b) Beyond the questions asked by Reed and Poole are those that the modern conservation experts wish to ask in relation to these skin remains from Palestine in antiquity. In addition to date and manner of production, there are a number of analytical questions that scientific investigators can now provide information on, such as DNA analysis⁸, to reveal whether fragments are from the same animal or whether in general manuscripts of particular kinds are related to one another, for example, were sourced from the same herd and thence from the same locality. Though it will not be worth analysing all of the thousands of fragments, the study of the Reed collection might hone the kind of data that it is possible to produce with conviction. In addition there are questions concerning the chemical composition and physical structure of the fragments at every level, matters now discernible in ways not available to Reed and his generation. Not even the dust on the fragments



Figure 2: The Reed collection in their original boxes. Photo courtesy of I. Rabin.

should be brushed aside, since it could provide information on provenance and storage in antiquity and up to today. Answers to such questions will contribute, for instance, to discerning how ancient interventions with the skin should be distinguished from modern contaminations.

(c) Some of these scientific interventions need to be undertaken with wider contextual research issues in mind, not just concern for the manuscripts themselves. A single example must suffice. One team of archaeologists has assumed from a somewhat problematic interpretation of hydrological data (criticised by Frumkin⁹) that the site of Qumran and the caves immediately adjacent to it, including Cave 4, were beneath the level of the Dead Sea for a short period at the end of the first century BCE.^{10,11} Since many of the Cave 4 fragments were found under a deposit of mud of some form, scientific analysis of Cave 4 fragments should be able to ascertain whether any of them actually show signs of being under the heavily saline Dead Sea waters. The wide and bizarre range of archaeological interpretations of the site of Qumran needs to be reduced.

4. Controls

My fourth main point is that the fresh analysis of the Manchester Dead Sea Scroll fragments is a pilot project to be seized with enthusiasm because it comes with its own set of controls. This could hardly be more fortunate. Most obviously these controls come with what has been provided by Ronald Reed himself in three ways. To begin with there are his own scientific publications through which he disseminated his analysis of the scrolls.¹²⁻¹⁶ In addition there is also the detailed doctoral thesis of Reed's student John Poole.¹⁷ The original thesis comes complete with descriptions of many of the individual fragments and is often illustrated with photographic prints of the microanalysis of the skin. And lastly there is a small independent collection of prints of the collagen as it was in the late 1950s. These prints are made from negatives taken with a magnification factor of up to twenty-five thousand. These prints came to the Manchester Museum as part of the collection of photographic images that are housed there on behalf of the Estate of John M. Allegro. They seem to have been sent to Allegro by Reed so that they could be displayed when Allegro gave public lectures on the scrolls. They were not taken by Allegro himself and so are not catalogued or reproduced in microfiche form in the complete edition of Allegro images connected with the scrolls.¹⁸

In addition the fragments have come to us without the substantial contamination of modern treatments that was administered to many other Dead Sea Scroll fragments.¹⁹ And we have a good general knowledge of how the fragments were handled



Figure 3: The John Rylands University Library Deansgate Building. Photo courtesy of J. Rylands University Library.

when they were initially analysed and how they were stored for a generation in a Leeds attic and then for the last ten years in the John Rylands University Library of Manchester, first in its building in Manchester City Centre on Deansgate and for the last two years on the main university campus. It will indeed be necessary to estimate how such handling and storage has affected the collagen in the samples in different ways over the last fifty years, but in the light of such climatic estimations it will certainly be possible to determine in several instances what has happened to the collagen in individual samples over the last fifty years. There can be few extant sample collections for which such analysis is possible.

A final aspect of control is provided by the complete extant collection of leather and parchment samples in the Reed collection in the John Rylands University Library of Manchester. The complete collection together with the whole range of Reed's publications indicates what might have been understood as best practice in understanding skin, its composition and deterioration, a generation ago. Here is a historical methodological benchmark which can act as a general control for the further study of the fragments.

5. Symbiosis with the AHRC Manchester Cairo Genizah Manuscript Project

Providentially, if indeed grant-awarding bodies believe in such a thing as Providence, it has only been in recent years that the University of Manchester has attempted the large task of comprehensively cataloguing, digitizing and conserving its stunning collection of about 10,000 manu-

script fragments from the Cairo Genizah. With a recent major grant from the AHRC, work is now well beyond the initial pilot stages which were funded from independent charitable foundations. As yet, there seems never to have been a single international colloquium that has considered how best the Cairo manuscripts should be conserved. Several collections, notably in Cambridge, have already undergone extensive conservation procedures, but best practice is as yet unclear. The interest generated by the reinvestigation of the Manchester Reed Dead Sea Scrolls fragments has stimulated the principal investigator of the Manchester Cairo Genizah project to initiate a reconsideration of the best means of conserving these medieval fragments. In turn the Reed collection may well benefit from the various research activities surrounding the Manchester Genizah project.

6. Conclusion: Having an Attractive Project for Attracting Funding

The label »Dead Sea Scrolls« has become archetypal. For example Richard Salomon has likened the ancient Buddhist Scrolls from Gandhāra to the Dead Sea Scrolls, not least because both were found in clay jars²⁰; and the discovery in July 2006 of a 7th or 8th century Psalter in the Irish south Midlands has been announced with the headline »'Irish Dead Sea Scrolls' in bog« by the BBC²¹ and others. The intriguing archetypal character of the Dead Sea Scrolls is based in part on their undoubted importance for the study of the origins of Judaism and Christianity and in part on the manner of their unexpected survival, fortuitous discovery, and partially previously unknown contents; those matters give them an immediately recognizable high profile in the public consciousness and make them attractive to funding bodies concerned with maximising the value of their awards.

I hope that the use of the Manchester Dead Sea Scroll fragments from the Reed collection will resonate intriguingly and magically with relevant funding bodies, will enable fresh international interaction between the disciplines and will



Figure 4: Data collection at the 10.1 X-ray diffraction station of the Synchrotron Radiation Source, Daresbury Laboratory. Photo E. Pantos.

encourage the development of new forms of conservation from which many collections of skin and parchment in the world's libraries and elsewhere can benefit.

7. References

1. L.H.Schiffman, J.C. VanderKam (eds), *Encyclopedia of the Dead Sea Scrolls*, Oxford University Press, New York, 2000.
2. P.R. Davies, G.J. Brooke, P.R. Callaway, *The Complete World of the Dead Sea Scrolls*, Thames and Hudson, London, 2002.
3. J. Mayo, (producer), *The Secrets of the Scrolls*, BBC Channel 4, first broadcast on 5th December 2006.
4. G. Vermes, *The Dead Sea Scrolls: Qumran in Perspective*, Collins, London, 1977.
5. E. Tov (with the collaboration of S.J. Pfann), *The Dead Sea Scrolls on Microfiche: A Comprehensive Facsimile Edition of the Texts from the Judean Desert*, Published under the auspices of the Israel Antiquities Authority, Brill/IDC, Leiden, 1993.
6. A.J.T Jull, D.J. Donahue, M. Broshi, E. Tov, *Radiocarbon Dating of Scrolls and Linen Fragments from the Judean Desert*, *Radiocarbon*, 1995, **37**, 11–19.
7. G. Doudna, *Dating the Scrolls on the Basis of Radiocarbon Analysis*, in: P.W. Flint, J.C. VanderKam (eds), *The Dead Sea Scrolls after Fifty Years: A Comprehensive Assessment*, Brill., Leiden, 1998, 430–471.
8. S.R. Woodward, G. Kahila, P. Smith, C. Greenblatt, J. Zias, M. Broshi, *Analysis of Parchment Fragments from the Judean Desert Using DNA Techniques*, in: D.W. Parry, S.D. Ricks (eds), *Current Research and technological Developments on the Dead Sea Scrolls: Conference on the Texts from the Judean Desert, Jerusalem, 30 April 1995* (Studies on the Texts of the Desert of Judah, 20), Brill., Leiden, 1996, 215–238.
9. A. Frumkin, *The Holocene History of Dead Sea Levels*, in Z. Ben-Avraham, J.R. Gat and T.M. Niemi (eds), *The Dead Sea: The Lake and its Setting*, Oxford University Press, New York, 1997.
10. M. Lönnqvist, K. Lönnqvist, *Archaeology of the Hidden Qumran: The New Paradigm*, Helsinki University Press, Helsinki, 2002.
11. M. Lönnqvist, K. Lönnqvist, *Reconstructing Some Palaeoenvironmental Phenomena and Geoarchaeological Processes at Qumran, Israel*, *The Qumran Chronicle*, 2006, **14**, 1–35.
12. D. Burton, J.B. Poole, R. Reed, *A New Approach to the Dating of the Dead Sea Scrolls*, *Nature*, 1959, **184**, 533–534.
13. J.B. Poole, R. Reed, *The 'Tannery' of 'Ain Feshkha*, *Palestine Exploration Quarterly*, 1961, **93**, 114–123.
14. Poole, J.B. and R. Reed, 1962 »The Preparation of Leather and Parchment by the Dead Sea Scrolls Community.« *Technology and Culture* 3:1–26
15. R. Reed, J.B. Poole, *A Study of Some Dead Sea Scroll and Leather Fragments from Cave 4 at Qumran: Part I*, *Proceedings of the Leeds Philosophical and Literary Society*, 1962, 9/1.
16. R. Reed, J.B. Poole, *A Study of Some Dead Sea Scroll and Leather Fragments from Cave 4 at Qumran: Part II, Chemical Examination*, *Proceedings of the Leeds Philosophical and Literary Society*, Scientific Section, 1964 9/6, 171–82
17. J.B. Poole, *The Nature, Origins and Techniques of Manufacture of Those of the Dead Sea Scrolls which are Made from Animal Skins*, Ph.D. Dissertation, The University of Leeds, 1959.
18. G.J. Brooke, H. Bond, *The Allegro Qumran Collection: Introduction and Catalogue; Microfiches*, Brill/IDC, Leiden, 1996.
19. K.L. Rasmussen, J. van der Plicht, F.H. Cryer, G. Doudna, F.M. Cross, J. Strugnell, *The Effects of Possible Contamination on the*

Radiocarbon Dating of the Dead Sea Scrolls I: Castor Oil,
Radiocarbon, 2001, **43**, 127–132.

20. R. Salomon, *Ancient Buddhist Scrolls from Gandhāra: The British Library Kharosī Fragments*. The British Library, London, 1999.

21. BBC, *Irish Dead Sea Scrolls' in bog*, 26 July 2006.
<http://news.bbc.co.uk/1/hi/world/europe/5216320.stm>. Accessed
19.12.2006.