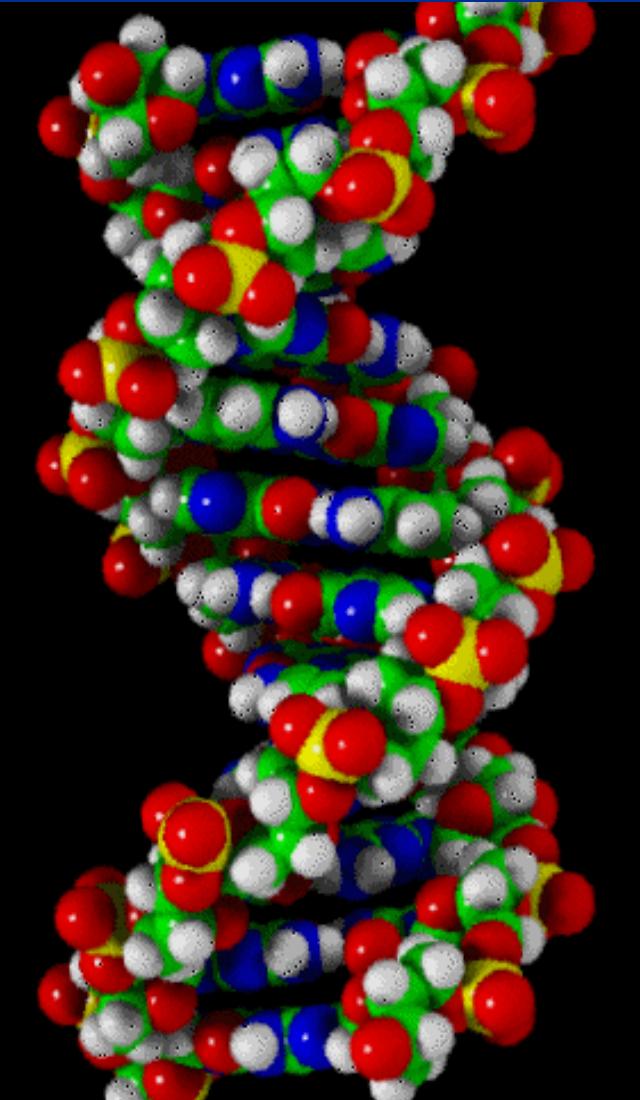
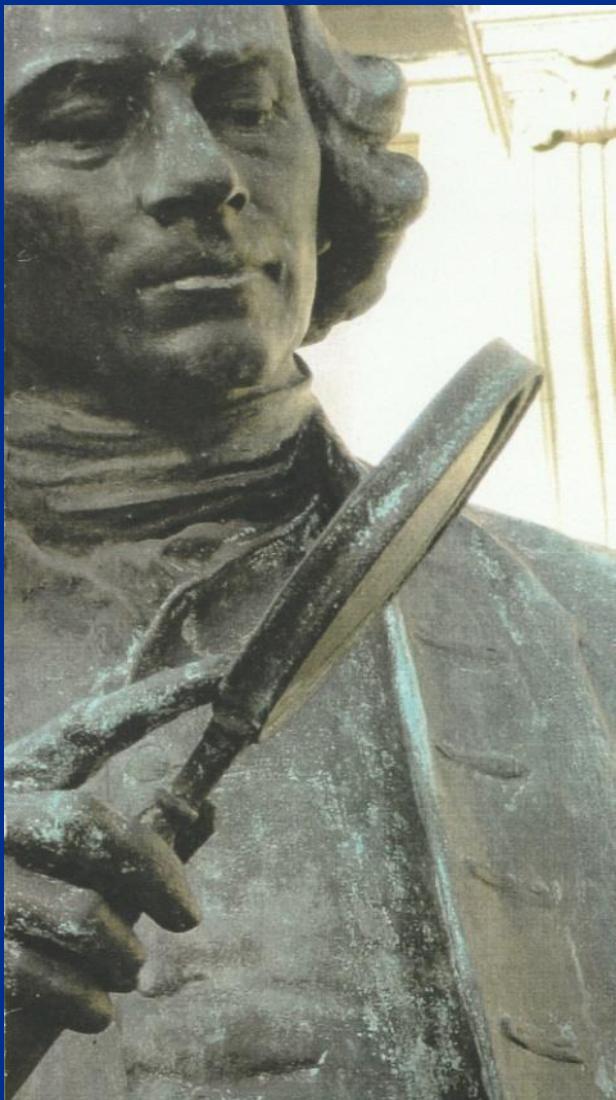


# *Annual Review 2018*



*Bicentenary Year 2019*



**Leeds Philosophical  
and Literary Society**  
**Annual Report and Review**  
**2018**

The 198<sup>th</sup> Annual Report of the Council  
at the close of the session 2017-18

*presented to the Annual Meeting held on  
6<sup>th</sup> December 2018*

and

Reviews of events and of grants awarded in 2018

THE LEEDS PHILOSOPHICAL AND LITERARY SOCIETY, founded in 1819, has played an important part in the cultural life of Leeds and the region. In the nineteenth century it was in the forefront of the intellectual life of the city, and established an important museum in its own premises in Park Row. The museum collection became the foundation of today's City Museum when in 1921 the Society transferred the building and its contents to the Corporation of Leeds, at the same time reconstituting itself as a charitable limited company, a status it still enjoys today.

Following bomb damage to the Park Row building in the Second World War, both Museum and Society moved to the City Museum building on The Headrow, where the Society continued to have its offices until the museum closed in 1998. The new Leeds City Museum, which opened in 2008, is now once again the home of the Society's office. In 1936 the Society donated its library to the Brotherton Library of the University of Leeds, where it is available for consultation. Its archives are also housed there.

The official charitable purpose of the Leeds Philosophical and Literary Society is (as newly defined in 1997) "To promote the advancement of science, literature and the arts in the City of Leeds and elsewhere, and to hold, give or provide for meetings, lectures, classes, and entertainments of a scientific, literary or artistic nature". The Society is keenly interested in cultural developments in Leeds and the region, and is constantly looking for new ways to further its aims.

*Application forms may be obtained from the Hon Treasurer and are also to be found on the Society's website.*

**Website:** [www.leedsphilandlit.org.uk](http://www.leedsphilandlit.org.uk)

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**THE LEEDS PHILOSOPHICAL AND LITERARY SOCIETY LIMITED  
LEGAL AND ADMINISTRATIVE INFORMATION**

<b>Constitution</b>	Company limited by guarantee Registered number 177204 Registered charity number 224084
<b>Governing document</b>	Memorandum and articles adopted 2 July 1997
<b>Members of Council (who are trustees for charity law and directors for company law)</b>	
<b>President</b>	C J Hatton BSc, PhD, CPhys, FInstP
<b>Vice-president</b>	A C T North BSc, PhD, CPhys, FInstP
<b>Treasurer</b>	C M Taylor BSc (Eng), MSc, PhD, DEng, FREng, FIMechE, FCGI
<b>Secretary</b>	J E Lydon BSc, PhD
<b>Other Council members</b>	G E Blair BSc, PhD (appointed 6 December 2018) D I Bower MA, DPhil, CPhys, MInstP Eveleigh Bradford BA R J Bushby BSc, DPhil Janet Douglas BA, MA F J Finlay BA, PGCE, PhD K T Hall BA, PhD, MA R Jakeways BSc, PhD, CPhys Cllr Elizabeth Nash I W Smith HonFLeedsCM (appointed 6 December 2018) Mollie Temple CBE, BA, MA, DUniv, DEd
<b>Registered Office</b>	c/o Leeds City Museum Cookridge Street Leeds LS2 8BH
<b>Website</b>	<a href="http://www.leedsphilandlit.org.uk">www.leedsphilandlit.org.uk</a>
<b>Bankers</b>	Lloyds Bank 65 – 68 Briggate Leeds LS1 6LH
<b>Investment advisors</b>	Investec Wealth and Investment 2 Gresham Street London EC2V 7QP
<b>Accountant</b>	Katharine Widdowson FCA 406 Otley Road Leeds LS16 8AD

# **THE LEEDS PHILOSOPHICAL AND LITERARY SOCIETY**

## **198<sup>TH</sup> ANNUAL REPORT FOR 2017-2018**

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The Council presents its report and financial statements for the year ended 30 September 2018. The financial statements comply with current statutory requirements and with the requirements of the Society's memorandum and articles.

### **CONSTITUTION**

The Society is a company limited by guarantee governed by its memorandum and articles of association. Membership is open to anyone on payment of an annual subscription which is due on 1 October each year. The Annual General Meeting held in December 2014 had agreed to raise the subscription from £18 to £25 p.a. with effect from 1 October 2015. Only those members who have paid or have been elected to Honorary Membership are entitled to vote at the AGM. In the event of the Society being wound up, every person who is a member, or who has been a member within one year, is liable to contribute to the debts and liabilities of the Society a sum not exceeding £10.

### **STRUCTURE, GOVERNANCE AND MANAGEMENT**

The members of the Council are considered to be both directors for Companies Act purposes and trustees for Charities Act purposes. One third of the members of Council retire by rotation at each Annual General Meeting (normally held in December), when appointments or reappointments are made. The Council has powers to co-opt to its membership. Membership of the Council takes into account the need to have members with expertise to cover the variety of activities of the Society. All members of the Society are notified prior to the AGM of the names of the Council members who are due to retire and are invited to submit nominations. At the AGM on 7 December 2017, Professor F J Finlay was elected to Council; Professor R Bushby, Dr J E Lydon and Professor A C T North were re-elected.

The Officers of the Society are elected by and from the members of Council at the first meeting of Council following the Annual General Meeting; at the Council meeting on 11 January 2018, Dr Hatton was elected as President, Dr Lydon as Secretary, Professor Taylor as Treasurer, and Professor North as Vice-President.

Council met on six occasions during 2017-2018 in the Civic Hall. Parts of its business were delegated to the following committees: Grants, Events, and Museums, chaired respectively by Dr Hatton, Professor Bushby, and Dr Hatton. The committees are required to act in accordance with the Society's Aims and Policies, and their recommendations are put to the Council for its approval.

Mr Norman Madill has continued as Assistant Secretary, managing the Society's links with its members and other necessary administrative matters. During the year Council decided to appoint an Assistant Treasurer to administer the day-to-day financial transactions of the Society. Members of the Society were invited to apply for the post and subsequently Mrs Susan Clarke was appointed with effect from 1st October 2018.

## **MEMBERSHIP**

During the course of the 2017/18 year, the Society lost 12 members (through death & resignations) and gained 5 new members; at the end of September, membership totalled 147.

## **THE SOCIETY'S AIMS AND ACTIVITIES**

### **General**

The Society aims to promote the advancement of science, literature and the arts in the city of Leeds and its immediate area. In furtherance of this aim, which Council believes to be of benefit to the public in this area, the Council's policy has been to disburse its income as follows by:

- providing a programme of free public lectures relevant to the Society's aims
- supporting the work of the City of Leeds Museums & Galleries
- supporting other activities in Leeds of a scientific, literary or artistic nature
- providing grants for purposes of research, publication, or artistic performance

### ***Grant-making policy***

In making grants to promote the advancement of the Society's aims, the Council places particular emphasis on (but does not limit its grants to) the support of activities which directly benefit the citizens of Leeds or assist those engaged in academic and scholarly activities relating to Leeds and its immediate area. It does not give grants in general support of students on taught courses. The value of grants is normally in the range £100 to £2,000, although this limit may be exceeded in special circumstances. The Council is keen to support new endeavours by the award of 'pump-priming' grants.

### ***The Society's archives***

The Society's archives are held in the Special Collections section of the Brotherton Library, University of Leeds, where they are available for public consultation.

## **ACHIEVEMENTS AND PERFORMANCE**

### ***Events***

The regular monthly events covered a wide range of topics as usual and were well supported both by Society members, guests and members of the public. The lectures in January and February took place in the afternoon in the City Museum. The other meetings were held at University House.

The following events took place:

- Professor Eric Blair. *The Science of Three-person Babies*
- Priestley Lecture. Professor Jonathan Powers. *Erasmus Darwin*.
- Annual General Meeting and dinner at University House. After-dinner speaker, Bobbie Millar. *Quarry Arts*.
- Professor Stephen Mobbs. *Volcanic Disruption of Air Travel – Can We Do Better?*
- Robert Woosnam-Savage. *The Killing of Richard III*.
- Annual Science Fair.
- Stuart Wrathmell. *Excavations at Kirkstall Abbey Guest House*.

- An evening with Sir Alan Langlands. Dinner and talk at University House.
- Dr Alaric Hall. *J.R.R. Tolkien in Leeds*.
- Peter and Barbara Murphy. *A year in the Life of Rodley Nature Reserve – Winner of Best Nature Reserve, BBC Countryfile Magazine*.
- Summer Outing. A visit to Beamish Museum
- Professor Adrian Whitehouse. *The Underappreciated Burden of Viruses in Cancer*.

## **Grants**

During the year the following grants were awarded by the Society:

- Martin Hamilton on behalf of the Leeds Civic Trust, £400 towards a blue plaque to commemorate William Gascoigne, the inventor of the telescope sight and telescope micrometer.
- Rehena Minhas, £600 to support local workshops at the first Leeds Peacejam Conference.
- Tristram Langlois, £400 towards the provision of blinds for ‘The Mess’, a dedicated area for school lunches at the Royal Armouries.
- Rachel Reeves, £500 to support research for her new book women in *Westminster: MPs Who Changed Politics*.
- Helen Barraclough, £1000 to support the delivery of the 2018 Bradford Science Festival.
- Brian Cole, £700 to support research into the career of Cedric Chivers whose company bound many thousands of the books in the Leeds Library.
- Dr Jackie Coates, £1000 towards the performance and recording of a new work, Penthos Requiem, commissioned by St Peter’s Singers from two of its members.
- Lucy Moore, £500 to enable the publication of a new booklet on the history of the Leeds Pals Battalion written by Leeds Museums & Galleries volunteers.
- Alice Barber, £1000 to support 10 performances of Front Room Productions’ abridged and accessible promenade version of Shakespeare’s *Twelfth Night* at Home Farm, Temple Newsam.
- Davide Levi, £1000 towards the performance of *Così fan tutt(i)* at Sunnybank Mills, Farsley.
- Geoff Wain on behalf of MathsWorldUK, £500 to support the production of a new exhibit to be used at science fairs around the UK.
- Carl Hutton on behalf of The Leeds Library, £1000 to support the *Through The Pages* exhibition, part of the 250th Anniversary Programme of the library
- David Ward, £1000 to support the 2018 Left Bank Opera Festival.

## ***The Leeds City Museum***

We have continued to enjoy a good relationship with the staff of the Museums, to whom we are most grateful for their collaboration. It has been helpful that Mr John Roles, the Head of Leeds Museums and Galleries, has attended a number of Council meetings. The Museums Committee, comprising representatives from the Council and the Leeds Museums Service, has met once in the course of the year and provides a valuable opportunity to discuss collaboration in the planning of events and the best use of grants for supporting the museum.

## **FINANCIAL REVIEW**

The Society's budget aims to fund all its events (lectures, dinners, trips etc), and grants, from its income the two major streams of which are the dividend income and subscriptions. The events expenditure is substantially offset by income. This budget omits the payment made during the year to the investment advisers which means that annually overall expenditure often exceeds income. The Society's financial position has been monitored regularly by the Council.

Income from investments within the financial year amounted to £15,716 and subscriptions and donations (including gift aid refund) to £4,331. The market value of the Society's investments this year has barely changed and stand at £466,937. Grants awarded during the financial year amounted to £10,000 and there were two transfers totalling £1,800 to the Society's Bicentenary Grant Fund. This fund, which has been developed to support the bicentennial year celebrations in 2019, now stands at £7,100.

### ***Reserves policy***

The Society's reserves comprise an unrestricted fund derived from past benefactions and its annual subscriptions, including the proceeds from the sale of the Philosophical Hall to Leeds City Council in 1921. The fund increased in value over the years as income exceeded expenditure and the value of investments increased. Since the Society adopted its new constitution in 1997, Council's aim in the medium term has been to fund its activities as described above and to sustain/increase the capital value of its investments whilst using all the annual dividend income to promote the in-year activities. The Society's income and expenditure do, however, vary from year to year depending on a number of factors. The Council therefore considers it prudent to hold liquid reserves in the Charities Deposit Fund and current bank account.

### ***Investment policy***

There are no restrictions in the Society's Memorandum and Articles on the Society's power to invest. The Council's investment objectives are to maintain a level of dividend income sufficient to contribute substantially to the Society's activities, while promoting the capital value of its invested assets over the long term. To this end, it is the Society's normal practice to reinvest realised gains on its assets. The Council has delegated the management of its investments on a discretionary basis to Investec Wealth and Investment.

### ***Risk management***

- 1) Income: The investment managers pursue an active investment policy to generate income on the Society's behalf. The outcomes are regularly reviewed by the Trustees.
- 2) Expenditure: Expenditure on individual events and grants usually represents a small part of total expenditure and risks are minimised by standard procedures for authorisation of all financial transactions. The potential risks at the Society's events are considered as part of the planning for them, and appropriate steps are taken, including the arrangement of Public Liability insurance as necessary.
- 3) The quality of the Society's events and the outcome of grants that have been awarded are reviewed by the Trustees, and details published in the Annual Review, so as to ensure that all the Society's activities are of a high standard consonant with its Aims.

The Society has taken advantage of the small companies' exemption in preparing this Directors' Report.

*Approved by the members of the Council on 8 November 2018 and signed on their behalf  
by C J Hatton (President) and J E Lydon (General Secretary)*

**THE LEEDS PHILOSOPHICAL AND LITERARY SOCIETY LIMITED**  
**STATEMENT OF FINANCIAL ACTIVITIES**  
**FOR THE YEAR ENDED 30 SEPTEMBER 2018**

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	Note	2018 General Fund £	2018 Designated Fund £	2018 Total Funds £	2017 General Fund £	2017 Designated Fund £	2017 Total Funds £
<b>Income from:</b>							
Subscriptions and donations		4,331		4,331	4,766		4,766
Investments		15,716		15,716	14,489		14,489
Charitable activities	2	4,342		4,342	3,695		3,695
<b>Total income</b>		<b>24,389</b>	-	<b>24,389</b>	<b>22,950</b>	-	<b>22,950</b>
<b>Expenditure on:</b>							
Investment management fees		4,486		4,486	4,510		4,510
Charitable activities	4	20,220		20,220	19,122		19,122
<b>Total expenditure</b>		<b>24,706</b>	-	<b>24,706</b>	<b>23,632</b>	-	<b>23,632</b>
<b>Gains/(Losses) on investment assets:</b>							
Realised	6	(3,388)		(3,388)	(116)		(116)
Unrealised	6	11,531		11,531	26,811		26,811
Total gains		8,143	-	8,143	26,695	-	26,695
<b>Net income for the year</b>		<b>7,826</b>	-	<b>7,826</b>	<b>26,013</b>	-	<b>26,013</b>
<b>Transfers between funds</b>	9	(1,800)	1,800	-	(1,550)	1,550	-
<b>Net movement in funds</b>		<b>6,026</b>	<b>1,800</b>	<b>7,826</b>	<b>24,463</b>	<b>1,550</b>	<b>26,013</b>
<b>Reconciliation of funds</b>							
Fund balances brought forward		491,474	5,300	496,774	467,011	3,750	470,761
<b>Fund balances carried forward</b>		<b>497,500</b>	<b>7,100</b>	<b>504,600</b>	<b>491,474</b>	<b>5,300</b>	<b>496,774</b>

The Society had no recognised gains or losses other than those shown above  
The notes on pages 12 to 16 form part of these accounts.

**BALANCE SHEET**  
**30 SEPTEMBER 2018**

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	Note	2018		2017	
		Total funds	£	Total funds	£
<b>Fixed assets</b>					
Intangible	5		5,843		4,869
Investments	6		471,513		466,917
<b>Current assets</b>					
Debtors	7	2,086		755	
Short term deposits		19,745		19,672	
Cash at bank and in hand		7,714		6,841	
		29,545		27,268	
Creditors: amounts falling due within one year	8	(2,301)		(2,280)	
<b>Net current assets</b>			27,244		24,988
<b>Total net assets</b>			<u>504,600</u>		<u>496,774</u>
<b>Funds</b>					
General Fund - unrestricted		497,500		491,474	
Designated Fund -					
Bicentenary Grant Fund	9	7,100		5,300	
<b>Total charity funds</b>			<u>504,600</u>		<u>496,774</u>

For the year ended 30 September 2018 the company was entitled to exemption from audit under sections 475 and 477 of the Companies Act 2006. No member eligible to do so has required the company to obtain an audit of its accounts for the year ended 30 September 2018 in accordance with section 476.

**Directors' responsibilities:**

The directors acknowledge their responsibility for complying with the requirements of the Companies Act 2006 with respect to accounting records and the preparation of the accounts.

These accounts have been prepared and delivered in accordance with the special provisions in part 15 of the Companies Act 2006 applicable to companies subject to the small companies regime.

Approved by the Members of Council on 8 November 2018 and signed on their behalf by:

C J Hatton

President

C M Taylor

Treasurer

**STATEMENT OF CASH FLOWS**  
**FOR THE YEAR ENDED 30 SEPTEMBER 2018**

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	2018	2017
	Total Funds £	Total Funds £
<b>Cash flows from operating activities:</b>		
<i>Net cash provided by (used in) operating activities</i>	<u>(16,694)</u>	<u>(20,139)</u>
<b>Cash flows from investing activities:</b>		
Dividends and interest from investments	15,716	14,489
Proceeds from the sale of investments	135,342	169,405
Purchase of investments	(131,795)	(165,758)
Purchase of fixed assets	(1,623)	(4,869)
<i>Net cash provided by (used in) investing activities</i>	<u>17,640</u>	<u>13,267</u>
<i>Change in cash and cash equivalents in the year</i>	946	(6,872)
<b>Cash and cash equivalents at the beginning of the year</b>	<u>26,513</u>	<u>33,385</u>
<b>Cash and cash equivalents at the end of the year</b>	<u>27,459</u>	<u>26,513</u>
<b>Reconciliation of net income/ (expenditure) to net cash flow from operating activities</b>		
	2018	2017
	Total Funds £	Total Funds £
<i>Net income/ (expenditure) for the year as per the statement of financial activities</i>	7,826	26,013
<b>Adjustments for:</b>		
(Gains)/ losses on investments	(8,143)	(26,695)
Dividends and interest from investments	(15,716)	(14,489)
Amortisation of intangible asset	649	-
(Increase)/ Decrease in debtors	(1,331)	1,012
Increase/ (Decrease) in creditors	21	(5,980)
<i>Net cash provided by (used in) operating activities</i>	<u>(16,694)</u>	<u>(20,139)</u>
<b>Analysis of cash and cash equivalents</b>		
	2018	2017
	£	£
Cash at bank and in hand	7,714	6,841
Short term deposits	19,745	19,672
<b>Total cash and cash equivalents</b>	<u>27,459</u>	<u>26,513</u>

# **NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 30 SEPTEMBER 2018**

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## **1 Accounting policies**

The principal accounting policies in the preparation of the financial statements are as follows:

### ***a) Basis of preparation***

The financial statements have been prepared in accordance with Accounting and Reporting by Charities: Statement of Recommended Practice applicable to charities preparing their accounts in accordance with The Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (effective 1 January 2015) - (Charities SORP (FRS 102)), the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) and the Companies Act 2006.

The Society meets the definition of a public benefit entity under FRS 102. Assets and liabilities are initially recognised at historical cost or transaction value unless otherwise stated in the relevant accounting policy note.

### ***b) Fund accounting***

Unrestricted funds are available to spend on activities that further any of the purposes of the Society. Designated funds are unrestricted funds which the trustees have decided at their discretion to set aside to use for a specific purpose. Restricted funds are donations which the donor has specified are to be used solely for a particular activity by the Society.

### ***c) Income***

Income is recognised when the Society has entitlement to the funds, any performance conditions relating to the item of income have been met, it is probable that the income will be received and the amount can be measured reliably. Subscriptions and donations are recognised when receivable. Investment income is included when it is receivable, and includes any recoverable income tax.

### ***d) Expenditure***

Expenditure is recognised once there is a legal or constructive obligation to make a payment to a third party, it is probable that settlement will be required and the amount of the obligation can be measured reliably. All expenditure is accounted for on an accruals basis. Expenditure on charitable activities is set out in the notes to the accounts.

### ***e) Tangible and intangible fixed assets***

Tangible and intangible fixed assets are initially recognised at their transaction value and depreciated from the date they come into use over their estimated useful life.

Website – straight line over 5 years.

### ***f) Fixed assets investments***

Investments are a form of basic financial instrument and are initially recognised at their transaction value and subsequently measured at their fair value as at the balance sheet date using the closing market price. The Statement of Financial Activities includes the net gains and losses arising on revaluation and disposals throughout the year.

All gains and losses are taken to the Statement of Financial Activities as they arise. Realised gains and losses are calculated as the difference between sales proceeds and the opening carrying value or the purchase value if acquired during the year. Unrealised gains and losses are calculated as the difference between the fair value at the year end and the carrying value. Realised and unrealised gains and losses are combined in the Statement of Financial Activities.

**NOTES TO THE ACCOUNTS (continued)**  
**FOR THE YEAR ENDED 30 SEPTEMBER 2018**

---

**g) Debtors**

Trade and other debtors are recognised at the settlement amount due after any trade discount offered. Prepayments are valued at the amount prepaid. Accrued income and tax recoverable is included at the best estimate of the amount receivable at the balance sheet date.

**h) Cash at bank and in hand and short term deposits**

Cash at bank and cash in hand includes cash and short term highly liquid investments with a short maturity of three months or less from the date of acquisition or opening of the deposit or

**i) Creditors**

Creditors are recognised where the Society has a present obligation resulting from a past event that will probably result in the transfer of funds to a third party, and the amount due to settle the obligation can be measured or estimated reliably. Creditors are normally recognised at their settlement amount. Grants payable are recognised when the application has been approved, the recipient has been told of that approval and if applicable has accepted the terms related to the grant offered.

	2018	2017
	£	£
<b>2 Income from charitable activities</b>		
Events and lectures	4,283	3,695
Publication sales	59	-
	<hr/>	<hr/>
	4,342	3,695
	<hr/>	<hr/>

**3 Analysis of staff costs, trustee remuneration and expenses and the cost of key management personnel**

There were no employees of the charity during the year or the previous year.

The key management personnel are the trustees. No remuneration was paid to any trustee during the year or the previous year. Expenses of £60 were reimbursed to one trustee (2017: £22). On occasion trustees may act as agent for the Society, make a purchase on its behalf and be reimbursed for this expenditure, eg payment for stationery. Such expenditure is not related to services provided by the trustees so is not disclosed. The assistant secretary received an honorarium as disclosed in note 4, expenditure on charitable activities.

	2018	2017
	£	£
<b>4 Expenditure on charitable activities</b>		
<b>Grant making</b>		
Projects or organisations (8 grants; 2017: 12 grants)	6,900	7,150
Individuals (4 grants; 2017: 1 grant)	2,700	1,350
Leeds City Council (2 grants; 2017: 3 grants)	900	650
University of Leeds (no grant. 2017: 1 grant)	(500)	1,100
	<hr/>	<hr/>
	10,000	10,250
	<hr/>	<hr/>

**NOTES TO THE ACCOUNTS (continued)**  
**FOR THE YEAR ENDED 30 SEPTEMBER 2018**

	2018 £	2017 £
<b>4 Expenditure on charitable activities (continued)</b>		
<i>Events and lectures</i>		
Events and lectures	<u>5,242</u>	<u>4,630</u>
<i>Other charitable activities</i>		
Science Fair banner	133	-
Purchase of publications	50	-
	<u>183</u>	<u>-</u>
<i>Support costs</i>		
Annual Review 2017	286	274
Stationery	157	328
Telephone & postage	353	495
Insurance	461	442
Accountancy	660	650
Assistant secretary's honorarium	2,000	2,000
Website hosting and maintenance	156	40
Amortisation of website cost	649	-
Other expenses	73	13
	<u>4,795</u>	<u>4,242</u>
<b>Total expenditure on charitable activities</b>	<u>20,220</u>	<u>19,122</u>

The grant recipients are listed in the Annual Report for the year.

	Website £
Cost	
At 1 October 2017	4,869
Additions	<u>1,623</u>
At 30 September 2018	<u>6,492</u>
Amortisation	
At 1 October 2017	-
Charge for the year	<u>649</u>
At 30 September 2018	<u>649</u>
Net book value	
At 1 October 2017	<u>4,869</u>
At 30 September 2018	<u>5,843</u>

**NOTES TO THE ACCOUNTS (continued)**  
**FOR THE YEAR ENDED 30 SEPTEMBER 2018**

---

**6 Fixed asset investments**

	Listed Investments	Cash for investment	Total 2018	Total 2017
	£	£	£	£
Market value at 1 October 2017	450,623	16,294	466,917	443,869
Less:				
Disposals at opening market value	(138,730)	-	(138,730)	(169,521)
Investment management fees	-	(4,475)	(4,475)	(4,454)
Add:				
Acquisitions at cost	143,513	-	143,513	203,051
Cash reinvested	-	(7,243)	(7,243)	(32,839)
Net gains on revaluation	11,531	-	11,531	26,811
Market value at 30 September 2018	466,937	4,576	471,513	466,917
Historical cost at 30 September 2018	399,895	4,576	404,471	398,768
Disposals:		£		£
Proceeds		135,342		169,405
Book value at 1 October 2017		(138,730)		(169,521)
Realised (loss) /gain		(3,388)		(116)

All fixed asset investments are held in the UK, in nominee accounts by the investment managers.

Details of the investment portfolio are as follows:

	2018	2017
	£	£
Unit and investment trusts holding UK and non-UK equities	339,683	332,581
Gilts, bonds and fixed interest stocks	127,254	118,042
Cash held by investment managers	4,576	16,294
	471,513	466,917

**Material investments worth more than 5% of portfolio**

The portfolio includes 6 (2017:5) unit or investment trusts worth between 5% and 7% of the total value.

	2018	2017
	£	£
<b>7 Debtors</b>		
Investment income	1,414	540
Prepaid expenses	672	215
	2,086	755

**NOTES TO THE ACCOUNTS (continued)**  
**FOR THE YEAR ENDED 30 SEPTEMBER 2018**

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	2018	2017
	£	£
<b>Creditors: amounts falling due within one year</b>		
Accrued expenses	2,301	2,280
	<u>2,301</u>	<u>2,280</u>

<b>Designated Fund</b>	At 1 Oct			At 30 Sept 2018
	2017 £	Transfer in £	Payments £	
Bicentenary Grants Fund	5,300	1,800	-	7,100

<b>Designated fund - previous year</b>	At 1 Oct			At 30 Sept 2017
	2016 £	Transfer in £	Payments £	
Bicentenary Grants Fund	3,750	1,550	-	5,300

Council has set aside funds to support the promotion of activities associated with the bicentenary year of the Society in 2019.

**Analysis of net assets between funds at the year end**

	General £	Designated £	Total Funds £
<b>Analysis of net assets between funds</b>			
Intangible assets	5,843	-	<b>5,843</b>
Investments	471,513	-	<b>471,513</b>
Net current assets	20,144	7,100	<b>27,244</b>
<b>Total net assets</b>	<b>497,500</b>	<b>7,100</b>	<b>504,600</b>

	General £	Designated £	Total Funds £
<b>Analysis of net assets between funds - previous year</b>			
Intangible assets	4,869	-	<b>4,869</b>
Investments	466,917	-	<b>466,917</b>
Net current assets	19,688	5,300	<b>24,988</b>
<b>Total net assets</b>	<b>491,474</b>	<b>5,300</b>	<b>496,774</b>

## The year's finances at a glance

We are required by law to set out our finances in the form given in the preceding pages. It may however be helpful to set the Society's finances during the financial year in a different context. The Society sets a broad budgetary aim of funding its grants, events and administration from subscription and dividend income during any financial year. To this end a budget is drawn up and approved by Council to attempt to achieve a balance between income and expenditure determined on a receipts and payments basis for the financial year, with a modest surplus. The pie charts for income and expenditure during the 2017-18 financial year for this budget are presented below. It should be noted that the expenditure shown in the chart omits the Investment Management fee, which has been subtracted directly from the investment capital, as in other recent years. In recording income and expenditure as detailed above in order to achieve the objectives indicated in the Financial Review of the accounts, there are differences in totals from those detailed in the formal accounts. Such differences are a consequence of a number of features but are not of significance in regard to the overall observations.

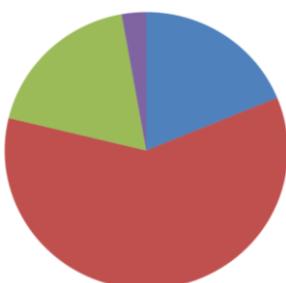
In 2017-18 thirteen grants awarded to outside bodies were paid, totalling £10,500. Council also approved two transfers totalling £1,800 to a fund to support the bicentenary of the Society in 2019. The Bicentenary Grant Fund now stands at £7,100. As usual, the difference between events income and expenditure is small, representing hospitality for guests.

Dividends within the financial year amounted to some 60% of the income, and subscriptions (including gift aid) 19%. Other income included a sum of £500 returned as unwanted from a grant award in the previous financial year. Grant payments represented 48% of expenditure (omitting the contribution to the Bicentenary Grant Fund) and the cost of public lectures/the Science Fair 3%. Administration costs totalling 16% of expenditure include the Assistant Secretary's honorarium, the accountant's fee, stationery, photocopying, telephoning, postage and printing.

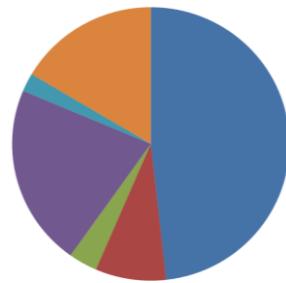
During the year the final payment of £1,623 for the development of the new website was made as was the annual cost of website maintenance of £420. Neither of these payments is recorded in the pie chart data.

**Chris. Taylor, Treasurer**

Income (£23,059)



Expenditure (£21,774)



- Subscriptions (includes Gift Aid refund) (£4,331)
- Dividends (£13,830)
- Events (Dinners/Summer Outing) (£4,254)
- Other (£644)

- Grants (£10,500)
- Bicentennial Fund (£1,800)
- Lectures, Science Fair (£731)
- Events (£4,679)
- Insurance/Contingencies (£474)
- Administration (£3,590)

## Presidents

*(since the foundation of the Society)*

1820-26	John Marshall	1922-24	Arthur J Grant, MA
1826-28	Revd W H Bathurst, MA	1924-26	Walter Garstang, MA, DSc, FZS
1828-31	Michael Thomas Sadler, MP	1926-28	Edwin Hawkesworth
1831-33	William Hey	1928-30	F W Branson, FIC
1833-35	James Williamson, MD	1930-32	E O Dodgson
1835-37	Revd Joseph Holmes, MA	1932-34	A Gilligan, DSc, FGS
1837-40	Revd Richard Winter Hamilton	1934-36	R Whiddington, MA, DSc, FRS
1840-42	Adam Hunter, MD	1936-39	Hugh R Lupton MC, MA
1842-45	John Hope Shaw	1939-46	W M Edwards, MC, MA
1845-50	Revd William Sinclair, MA	1946-48	E A Spaul, DSc, PhD
1850-51	William West, FRS	1948-50	W L Andrews
1851-54	Revd Charles Wicksteed, BD	1950-52	J N Tetley, DSO, LLD
1854-57	John Hope Shaw	1952-54	Terry Thomas, MA, LLD, BSc, PhD
1857-58	James Garth Marshall, FGS	1954-56	H C Versey, DSc, FGS
1858-59	Revd W F Hook, DD	1956-58	H S Vick, JP
1859-61	Revd Alfred Barry, MA	1958-60	H Orton, MA, BLitt
1861-63	Thomas Pridgin Teale, FRS	1960-62	Sir George Martin, LLD, JP
1863-66	Revd Thomas Hincks, BA	1962-64	E J Wood, MA
1866-68	Charles Chadwick, MD	1964-66	R D Preston, DSc, FInst P, FRS
1868-72	John Deakin Heaton, MD	1966-68	J le Patourel, MA, DPhil
1872-74	Revd Canon Woodford, DD	1968-70	G P Meredith, MSc, MEd, PhD
1874-76	J I Ikin, FRCS	1970-72	J G Wilson, MA, PhD, FInst P
1876-78	Revd J H McCheane, MA	1972-74	J Taylor, MA
1878-81	T Clifford Allbutt, MD, FRS	1974-76	H Henson, DSc, PhD, FRES
1881-83	Revd John Gott, DD	1976-78	P R J Burch, MA, PhD
1883-85	J E Eddison, MD	1978-81	R Reed, MSc, PhD
1885-86	Edward Atkinson, FLS	1981-83	Lord Marshall of Leeds, MA, LIB
1886-89	Thomas Marshall, MA	1983-85	B R Hartley, MA, FSA
1889-92	Thomas Pridgin Teale, MA, FRS	1985-87	D Cox, BA, ALA
1892-94	Revd J H D Matthews, MA	1987-89	B Colville, MB, BS, FRCGP
1894-96	Revd Charles Hargrove, MA	1989-91	I S Moxon, MA, BA
1896-98	Edmund Wilson, FSA	1991-93	R F M Byrn, MA, PhD
1898-00	Nathan Bodington, MA, LittD	1993-95	Mrs J E Mortimer, BA
1900-02	J H Wicksteed, President InstME	1995-97	A C Chadwick, BSc, PhD, DSc, CBiol, FIBiol, FRGS
1902-04	Arthur Smithells, BSc, FRS	1997-99	O S Pickering, BA, BPhil, PhD, DipLib
1904-06	J E Eddison, MD	1999-03	P J Evennett, BSc, PhD, Hon FRMS
1906-09	E Kitson Clark, MA, FSA, MInstCE	2004-07	M R D Seaward, MSc, PhD, DSc, FLS
1909-11	Revd J R Wynne-Edwards, MA	2007-10	C J Hatton, BSc, PhD, CPhys, FInstP
1911-12	C T Whitmell, MA, BSc, FRAS	2010-13	A C T North, BSc, PhD, CPhys, FInstP
1912-14	P F Kendall, MSc, FGS	2013-16	Joyce M Hill, BA, DPhil, DUniv, FEA, FRSA
1914-17	Revd W H Draper, MA	2016-	C J Hatton, BSc, PhD, CPhys, FInstP
1917-19	James E Bedford, FGS		
1919-22	Sydney D Kitson, MA, FSA, FRIBA		

## **Life Members**

Byrn, Dr R F M	Laurence, Miss M
Day, N	Moxon, I S

## **Subscribing Members, as at 31.12.2018**

Adamthwaite, Professor A P	Drewett, Dr R	McCleery, Dr I
Andrews, Professor R A	Drife, Dr D	McLauchlan, Dr A
Archenhold, W F	Eastabrook, Ms G	McTurk, Professor R
Arnold, J O	El-Hassani, M R	Madill, N
Barker, Ms J	Evans, Ms L	Marchant, Dr P
Bassant, M	Evennett, Dr P J	Meadowcroft, M
Beddows, Professor C G	Eyres, Dr P J	Meredith, Professor P
Bielby, N	Farmer, P J	Mill, Dr P J
Blair, Professor G E	Finlay, Professor F J	Millner, Professor P A
Blair, Dr M	Fletcher, Dr C R	Morgan, C J
Bourdillon, Ms A L	Godfrey, Ms M A	Morgan, Professor G J
Bower, Dr D I	Golphin, Dr P	Morris, A
Bradford, Mrs E J	Grady, Dr K	Müller, A E W
Bradford, J M	Griffin, Mrs E	Murphy, K
Briggs, M	Hall, Dr K	Nash, Cllr Mrs E A
Britten, E A	Hammond, Dr C	Newiss, Miss J
Brown, Mrs C	Hann, Professor M A	Nix, P J
Bushby, Professor R J	Harrison, Mrs H	North, Professor A C T
Butlin, Professor R K	Harrison, M R	Oakshott, Ms J, MBE
Cecil, Dr H	Hatton, Dr C J	Parker, Dr K D
Chadwick, Mrs A L	Henderson, Professor P J F	Paterson, Dr A
Chadwick, P R P	Higgins, Dr J M	Peat, Dr D W
Chesters, Dr M S	Higgins, Dr S J	Pickering, Dr O S
Childs, Professor W R	Hindmarch, Professor I	Radford, Dr A
Clark, Mrs E A	Hollings, Mr C	Ramsay, Ms G V
Clarke, Ms S	Hope, Professor T E J	Rastall, Professor G R
Collins, C J	Jakeways, Dr R	Rawnsley, Dr S J
Conaboy, A	Jenkins, Professor E W	Reeves, Ms R, MP
Cooper, Miss E	King, Dr M H	Reynolds, P
Crosswell, R	Kirby, Revd Dr D A	Richardson, Professor B F
Cruse, J	Knapp, Dr D G	Roberts, Professor K J
Dagg, Dr M	Lance, Professor C E	Robson, Ms R M
de Pennington, Mrs J	Larkin, B	Roche, Mrs G M
Devereux, Dr T A	Lawson, P W G	Rushton, Professor J G
Dodson, Mrs H I	Lewis, Dr E L V	Salinger, Dr D
Douglas, Ms J	Lydon, Dr J E	Savage, Professor M D
Dowson, Professor D	Lynch, Ms K	Seaward, Professor M R D

Sellen, Dr D B	Swire, Ms L M P	Watson, Professor A A
Shaw, K	Tannett, P G	Webster, I C
Slomson, Dr A	Taylor, Professor C M	Wesley, Mrs J
Smith, W	Temple, Mrs M	West, A
Smithson, R T	Thornton, Dr D	Widdowson, Mrs J
Stafford, Professor P A	Turney, Dr J	Wilson, Miss C A
Stephenson, Mrs A	Turton, Dr A	Winn, P
Sunderland, Dr P	Wain, G	Wood Robinson, Mrs V
Sutcliffe, Mr J R	Wainwright, M	Wright, Dr P G
Suter, Mrs P A	Wainwright, Mrs P	
Sutton, Dr S L	Ward, D	

We note with regret that three members of the Society,  
 Mr A Henderson, Dr J R Sherwin and Dr H V Wyatt,  
 died during 2018.



## Reports of Events held during 2018

*Editor's note: the events described below cover the calendar year 2018 and therefore differ from those listed in the Annual Report section of the Review, which are for the financial year 1 October 2017 to 30 September 2018.*

**Volcanic disruption of air travel: can we do better? Stephen Mobbs**  
*18 January 2018*

Impressive technological achievements such as international air travel can easily lull us into thinking that we are no longer beholden to the forces of nature – but in 2010 we received a stark reminder that this was by no means yet the case. When the Icelandic volcano Eyafjallajokull erupted beneath an ice cap in April of that year, it released an ash cloud so big that it was visible from space and forced twenty countries to close their airspace to commercial jet traffic for several days. This wide-scale disruption resulted in an estimated loss of \$1.7 billion to airlines while the economic loss to Europe as a whole approached \$3.6 billion. Yet as Professor Stephen Mobbs of the School of Earth and Environment at the University of Leeds, and Director of the NERC National Centre for Atmospheric Science explained, whilst we may still be unable to predict the timing of volcanic eruptions we can, thanks to improvements in science and technology take measures to limit the scale of the disruption that they cause.

One of the main areas of Professor Mobbs' research is using computer modelling to analyse and predict atmospheric dynamics such as in his study of the 1986 Lake Nyos disaster when a dense cloud of carbon dioxide spread through a mountainous region of Cameroon. In the wake of the Eyafjallajokull eruption, his expertise in this area was invaluable. Using an airborne chemistry laboratory equipped with instruments such as spectrometers and a LIDAR system which uses an infra-red laser to study layers of ash, Professor Mobbs and his team analysed the composition and distribution of the ash cloud and from their results they were able to offer crucial guidance to the official advice issued by the Volcanic Ash Advisory Centres (VAACs).

Following incidents such as the eruption of Mt. Galunggung in 1982 which caused serious disruption to a BA flight, nine of these centres were established worldwide to monitor volcanic eruptions and the subsequent ash clouds released. The Meteorological Office serves as the London VAAC and, following the Eyafjallajokull eruption, the official advice that was issued to airline pilots was simply to avoid flying through visible ash. Yet, as Professor Mobbs, explained this would rule out any night-time flights and did not take account of the fact that much of this ash, whilst so fine that it could not be seen by pilots, could still pose a serious problem to aircraft. When the fine ash is sucked into jet engines it can melt and fuse onto the blades or cause serious corrosion of engine parts, resulting in engine failure.

What was required was to establish a quantitative level of ash that could be agreed upon as a threshold above which flying was not permitted. As a result of the measurements made by Professor Mobbs and his team the Civil Aviation Authority was able to issue pilots with new guidance for flying through volcanic ash clouds based on a specific numerical threshold of ash. But although the establishment of a quantifiable threshold of ash tolerance, may be invaluable in minimising the disruption to air traffic by future eruptions, other challenges remain. One of the reasons that the ash cloud from the Eyafjallajokull eruption was so disruptive was because of the particular weather patterns that dispersed the ash. Using computer modelling to predict weather patterns Professor Mobbs hopes that we can learn more about the dispersal of volcanic ash. But the most ambitious long-term goal – and an invaluable one – is to be able to predict in advance when a volcano will erupt. It is now known that even a non-erupting volcano releases gases such as carbon dioxide, sulphur dioxide and hydrogen sulphide and monitoring the changes in these emissions may provide an indication of when an eruption is likely. Professor Mobbs has been particularly interested in developing computers models of carbon dioxide emissions from one of the 30 potentially active volcanoes in Iceland, called Katla, in the hope that this will help us to predict with more accuracy the timing of a a future eruption.

The implications of being able to predict an eruption in advance go far beyond air travel. In 1783-1784 the eruption of an Icelandic volcano resulted in the death of 75% of the livestock and 21% of the population, and parish records from this time show an increase in deaths in England, the Netherlands, Italy and Sweden – arising presumably from crop failures due to the increased cooling caused by the ash cloud. In the book 'Catastrophe' (Arrow books, 2000), David Keys argued that a massive climatic change in the mid-6<sup>th</sup> century, most likely triggered by a volcanic eruption, resulted in famine, plague, war and huge political upheavals and dire predictions about the global consequences should the supervolcano rumbling away

beneath Yellowstone National Park in the USA ever erupt are a sobering reminder of the importance of this work.

To conclude on a lighter note, if, thanks to this work, the scale of disruption to civilian flights following future eruptions can be minimised, a great many air passengers will probably be very grateful to Professor Mobbs and his team. As will also, no doubt, be the Icelandic Tourist Industry who may well see an influx of visitors after Professor Mobbs concluded his talk by treating the audience to a virtual flight over the rugged beauty of the Icelandic landscape – whilst a slide of a stunning sunset over Ilkley moor caused by dust from the Eyafjallajökull eruption reminded us that even a volcanic ash cloud can sometimes have a silver lining.

### ***Kersten Hall***

#### ***Excavations at Kirkstall Abbey Guest House Stuart Wrathmell***

*22 February 2018*

Stuart Wrathmell spoke to members of the Society shortly before the publication of the second volume of his account of the excavations at Kirkstall Abbey which he helped to supervise. The talk focussed on the findings from the excavation of the Guest House which had provided very rich evidence of the layout of the site and the activities carried out there. It was claimed that the examination of the Guest House had resulted in the best assemblage of remains of artefacts from anywhere in England.

What was a Guest House? Cistercian monks were required to live a secluded life and their monasteries were built in isolated places. Kirkstall was well wooded and without distractions when the monks arrived in 1152. However the monks were also under an obligation to provide hospitality. The rule of St. Benedict stated 'all guests who present themselves are to be welcomed as Christ'. To meet the conflicting needs of seclusion and hospitality, separate accommodation was erected for the visitors outside the monastery itself. The Guest House had its own guest master, kitchen, brew house and provision for sleeping. The visitors were probably all male and were travellers who stayed overnight or the more problematic longer term guests. The quality of hospitality provided accorded with the social standing of the visitor. Noble visitors could be an expensive problem. At one time the Abbey was in financial difficulties and in effect went into administration. An appointee of the King sorted the matter. Stuart introduced us to a term unknown to most of us – a corrodion. This was a person who made provision for their old age by giving money to the Abbey which would then support them as a guest as they aged. This development led to changes in the Guest House structure. In the 15th century separate chambers were constructed to accommodate corrodions.

We have little knowledge of the actual visitors to the Guest House because of the paucity of documents from Kirkstall. However the artefacts found in the Abbey and at sites around Leeds do allow us to build a picture of the business of the monastery. On what were Abbey lands there is evidence of iron forges at Roundhay and Seacroft, water mills, tanning and

fulling and extensive agricultural activity across what is now West Yorkshire. Closer to the Abbey there is evidence of the way in which water transport was facilitated and water power made possible by the making of a weir and run off. The Guest House reveals painted glass and a water distribution system. Stuart also suggested the possibility of the casting of bells, glass-making and floor tile manufacture aided by itinerant craftsmen.

And what did women do? In 1402 women, on a prescribed day, were allowed to enter only the church but nowhere else in the Abbey. Stuart speculated that a Papal dispensation accorded this privilege to allow women to venerate the Girdle of St Bernard. This was a relic thought to protect women from the dangers of childbirth. The relic would not have been much use to the other inhabitants of Kirkstall.

### ***Mollie Temple***

#### **Science Fair 2018**

*17 March 2018*

This year's Science Fair followed the usual pattern with many of our regular participants and a few very welcome new ones. Attendance was good as usual and it was very pleasing to see families with young children who thoroughly enjoyed activities which were aimed at them. Rodley Nature Reserve brought along a tank of harvest mice which was very popular. Some youngsters also enjoyed taking owl pellets apart and identifying the animals that the owls had been eating which would have included, of course, harvest mice! Maths world showed people the joys of mathematics and the Royal Statistical Society introduced them to the mysteries of statistics.

Quarry Arts brought along a collection of musical rocks which were very much appreciated since they could be struck with hammers to make a satisfying and musical sound. The Leeds Astronomical Society had their telescopes and pictures on display and the Leeds Microscopical Society introduced visitors to the fascination of the very small.

A new comer was a display based on STEM (Science, Engineering and Mathematics) by the founder of Peapodicity. She had packs of cards with illustrations on them which, when scanned with a smart phone with a special free App, provided information about the illustrations on the phone screen. There were two sets of cards, rocks and astronomy. The latter were very popular and many visitors took a pack home with them. The Royal Society of Chemistry had a fascinating stall with a small tribe of student helpers explaining the exhibits to visitors. Another new participant explained the joys of bird watching and no doubt gained a few new adherents!

All in all it was good day and again we are deeply indebted to John Roles for permission to use the Central Museum Arena and to the staff of the museum who were, as usual, unfailingly helpful.

### ***Robin Jakeways***

## **The Killing of Richard III Bob Woosnam-Savage**

22 March 2018

*'Lo! Here this long usurped royalty,  
From the dead temples of this bloody wretch,  
Have I pluck'd off, to grace they brows withal:  
Wear it, enjoy it, and make much of it.'*

With these triumphant words, Lord Stanley takes the crown from the body of Richard III lying dead after the Battle of Bosworth Field and hands it to Henry VII in the closing scene of Shakespeare's play. But in his excellent book about genetics, 'A Brief History of Everyone Who Ever Lived' (Weidenfeld and Nicholson, 2016), the BBC science broadcaster and writer, Adam Rutherford argues that there remained yet one more final act to complete this drama – and one which would not be performed for nearly another six hundred years.

What Rutherford describes as 'Act VI' of Shakespeare's play came to its conclusion when newspaper headlines in 2013 announced that a skeleton, dug up from beneath a car park in Leicester the previous year had been identified as being that of Richard III. One of the participants in this final act was Bob Woosnam-Savage who, as former Curator of European Arms and Armour at the Glasgow Museum and now Curator at the Royal Armouries in Leeds used his expert knowledge of medieval weapons and armour to help reconstruct the last moments of Richard III at the Battle of Bosworth Field in 1485.

Bob first described how the exact location of the battlefield where Richard fell had long been the subject of much debate. One key distinctive geographical feature of the battlefield was a morass described in a chronicle from 1490 and although by the 16<sup>th</sup> century this had become covered by firm ground, archaeologists were finally able to pinpoint its location through the analysis of soil samples. But the most important piece of evidence which finally confirmed the location of the battlefield was the discovery in 2010 of the hilt of a sword that was identified by Bob.

Having located the battlefield, the question remained of what had become of Richard III? According to contemporary sources, his body was brought back to Leicester and buried in a tomb in Greyfriars Church. But when the abbey was demolished by Henry VIII during the Dissolution, any trace of the tomb was lost. It was an extraordinary stroke of luck therefore that when, in 2012, archaeologists began to excavate the car park which now stands on the site of the former abbey, the very first trench that was dug revealed a skeleton with a distinctly curved spine characteristic of scoliosis.

Bob's talk offered a powerful example of how science could inform and illuminate our interpretation and understanding of historical events. By comparing sequences of DNA extracted from the bones of the skeleton with those from living descendants of the Plantagenet line, it was confirmed that this was indeed the body of Richard III. Back in 1953 when James Watson and Francis Crick first proposed their double helical structure for DNA they made what must surely rank as one of the greatest understatements in the history of science when they remarked that it had not escaped their notice that their discovery might

hint at a possible means for how the genetic molecule could copy itself. Yet what they could never have anticipated was the myriad ways in which this knowledge would eventually be applied – such as identifying the bones of the last English King to die in battle!

The complete genome of Richard has now been sequenced, from which we can deduce that he would have had blue eyes and fair hair, and isotope analysis of his bones suggested a diet high in meat, fowl and wine. Although this would probably have been a good diet for the time, it was not enough to spare him from a brutal end as was evident from forensic study of the various types of trauma found on the skeleton. Incisions around the jaw area of the skull suggested that an attempt had been made to cut the straps of Richard's helmet, presumably in order to make his head vulnerable to a mortal blow. A huge hole in the back of his skull however suggested that, when this killing blow finally came, it was not from a swift thrust of a dagger through the eye socket – as was a favoured method of dispatching a prone and vulnerable opponent – but rather from penetration of the head by a halberd. Nor did these injuries cease once he was dead. Trauma to the pelvic region that was similar to that found on some of the bodies of the dead soldiers of Custer's 7<sup>th</sup> Cavalry following the Battle of Little Big Horn, suggested that injuries had been inflicted after death as part of an attempt to publicly desecrate the body – the code of chivalry, it seems, went no further than the pages of Arthurian Romance and certainly did not extend to the battlefields of the Middle Ages.

What was quite apparent from Bob's talk was that politics in the Middle Ages was a brutal business, and many would say that it continues to be so. But as they attempt to navigate the uncertain waters of Britain's departure from the EU, our leaders should perhaps be grateful that they are politicians in the 21<sup>st</sup> and not the 15<sup>th</sup> century. Six hundred years ago, a knife in the back of the kind received by Boris Johnson during his bid for leadership following the referendum on Britain's exit from the EU, would have been far more than just a mere metaphor – as Bob's talk showed quite vividly and viscerally.

### ***Kersten Hall***

### **An Evening with the Vice-Chancellor of the University of Leeds, Sir Alan Langlands 11 April 2018**

As in ‘Evening with’ meetings held in previous years, a Society dinner at the University of Leeds was followed by a talk, this year by the University’s Vice-Chancellor, in which he described both his own career and his assessments of the state and future of the University.

He was born in 1952 on Oak Apple Day (29<sup>th</sup> May) at his parent’s home, a stone’s throw from the present site of Strathclyde University. He attended Allan Glen’s School, whose motto was ‘Science with Compassion’ and whose numerous distinguished alumni had included the actor Dirk Bogarde, the architect Charles Rennie Mackintosh and the chemist Alexander Todd. With a degree in Biology from Glasgow University, he joined the NHS Graduate Programme, which led to jobs In Edinburgh and London. As General Manager of the North-West Thames Regional Health Authority and then Chief Executive of the NHS, he had been much involved with the rationalisation of London University’s medical schools and

the University's teaching hospitals. The lack of organisation had resulted in relative ineffectiveness in the London area, compared to other regions of the country, but amalgamations and re-organisation had transformed the situation.

In 1994, he had been appointed as Chief Executive of the NHS, a position which he had held for 7 years, 3½ under a Labour government and 3½ under a Conservative one; the post had been testing, but he had enjoyed it. Pressure for changes in working practices in the NHS had led to the setting up of bodies such as the National Institute for Health and Clinical Excellence and the Commission for Health Improvement. The period had also included the move of the NHS administration to Leeds (to the site known locally as 'The Kremlin'). Asked whether he too was going to move to Leeds, he could see no alternative to saying 'yes', a decision that he then had to confess to his wife. (His success with the NHS had been rewarded in 1998 by his being knighted in recognition of his service to the organisation.)

In 2000, he had been appointed Principal and Vice-Chancellor of the University of Dundee, but he continued to be involved with important health organisations, including Biobank, a major national and international health resource established by bodies including the Wellcome Trust, Medical Research Council and Department of Health.

2009 saw his move to be the Chief Executive of the Higher Education Funding Council, where he again was confronted by financial and organisational matters, the implications of which faced him on his move to Leeds as Vice-Chancellor in 2013, a move that resulted in him working and living in the same city for the first time for many years.

Leeds University he sees as a place with limitless potential. The University's motto *Et Augebitur Scientia* 'And Knowledge shall increase' could relate both to the size of the information within the place and to the growth of information you receive when you come and share it. The University aims to attract and retain high quality students from diverse backgrounds. It aims to be an outstanding research university, underpinned by the appointment of excellent young staff; funding has been set aside for over 100 appropriate people. Collaboration both within the university and with outside research institutes, both university and commercial, is an invaluable area for development.

Good relations with the city are most important, both for cultural activities such as the Leeds International Piano Competition, and for business organisations for which the university's expertise in fields such as data processing and management is a valuable asset. Its expertise in fields such as robotics and computer technology is also invaluable for local industry.

More widely, the University aims continually to develop collaboration with other regional organisations and with other countries, for example joint courses with universities in China.

To support expanding fields of work has involved financial outlay in new equipment, such as for magnetic resonance imaging, electron microscopy, X-ray crystallography, through a combination of external research grants and the university's own funds. In addition there is an extensive programme on new building and the refurbishment of existing buildings such as the Edward Boyle Library and the Houldsworth Building.

Although the Vice-Chancellor is optimistic about the future of the University, planning is made more difficult by changes in the national funding for higher education, availability of external grants, ever more complex regulations and, of course, 'BREXIT' as so many of its staff, students and research grants involve intra-European collaboration.

Sir Alan's talk led to a number of probing questions from an audience who had been greatly interested – another much-appreciated 'Evening with....'; the talk had been preceded by the usual excellent meal, prepared by the University House caterers.

### ***Anthony North***

#### ***Tolkien in Leeds Alaric Hall***

*17 May 2018*

The Lord of the Rings by J.R.R. Tolkien may well have been once voted the nation's favourite book in a BBC poll but for residents of Leeds it is one of his lesser known works that has a special significance. The Father Christmas Letters were written by Tolkien for the entertainment of his young sons and are part of the vast collection of over 500 boxes of material relating to Tolkien held by the Bodleian Library in Oxford which will go on display there in June in a major new exhibition entitled 'Tolkien: Maker of Middle-Earth'. Keen-eyed visitors to this exhibition might well note that the envelopes of some of his Father Christmas Letters bear the addresses '11 St. Mark's Terrace, Leeds' and '2 Darnley Road, West Park, Leeds' – for before Tolkien moved to Oxford, with which he is usually associated, he spent five years in Leeds where he was Reader in English.

In an illuminating and often very entertaining talk, Dr Alaric Hall who currently holds the same position that Tolkien held in the School of English at the University of Leeds, explored this little known chapter of Tolkien's life showing in particular how it proved to be fertile ground for Tolkien's creativity. At this time, degrees in English were a relatively new addition to the courses on offer and were widely considered to be intellectually inferior to more traditional undergraduate study in Classics, Medicine or Mathematics. It was Tolkien's task therefore to increase the intellectual challenge of the undergraduate course in English by making the study of Old and Middle English a core component of the syllabus. But as well as spending his time revising the undergraduate course, his years at Leeds were also a crucible in which he began to experiment creatively with Middle English to see how it might be used in a poetic form and one such literary experiment, 'The Clerke's Compleinte', took the form of a parody of Chaucer's 'The Canterbury Tales', in which he described the start of the academic year at Leeds:

*'When October, with his dark showers has drenched the earth, and wet winds creak...then people plan to better themselves, and get themselves some education in the young days of the academic year; and especially, from the corner of every shire in all the North, they head to Leeds, and in the fairest town of all Yorkshire they seek the deep, bright well of learning.'*  
*(Translation by Dr Alaric Hall)*

It was also during this time that he was working on his epic 'The Silmarillion' which, though revered by hardcore fans has recently achieved notoriety after having been savaged – quite literally – on BBC Radio 4's 'The Archers' of all places!

As well as describing Tolkien's creative work in this period, Alaric tackled the notion that Tolkien disliked Leeds and the students there, as was suggested in the introduction to the Swedish translation of 'The Lord of the Rings'. Thanks to the filth and grime from the industrial pollution, the city was certainly a grim place when he arrived but as a letter written in 1961 to his publishers Allen and Unwin shows, Tolkien nevertheless held it in special regard: *'I was devoted to the University of Leeds, which was very good to me, and to the students, whom I left with regret.'*

Having refuted this particular fallacy, Alaric went on to challenge some other cherished local folklore about Tolkien such as that the tower on Parkinson building was the inspiration for the tower of Orthanc in the Lord of the Rings, gently pointing out that this was a chronological impossibility given that Parkinson building was not even built at the time that Tolkien lived in Leeds! Perhaps more plausible is the story that Meanwood Valley, down which he would have walked to the University, was the inspiration for the Shire, homeland of the hobbits, but it is worth remembering that similar claims have also been made for Sarehole in Birmingham where he lived as a boy, and it would come as no surprise if the residents of Bloemfontaine in South Africa where he was born in 1892 have, at some point, also tried to present their home as a source of inspiration for the Shire!

### **Kersten Hall**

#### **A Year in the Life of Rodley Nature Reserve Peter and Barbara Murphy 28 June 2018**

This was a fascinating and beautifully illustrated account by Peter and Barbara Murphy of the trials and tribulations of running a large and varied Nature Reserve, which is situated on the banks of the Aire in Rodley. The reserve won high praise from the BBC Countryfile magazine in 2018 when it was awarded the title of "Nature Reserve of the Year". Peter gave the talk which was enhanced by the many superb pictures captured by Barbara, who is a very talented photographer.

Peter and Barbara have been intimately concerned with the reserve for a number of years and gave an excellent account of its successes and problems, the latter being principally the Boxing Day Floods of 2015, which wreaked general havoc over the whole area. The strenuous efforts of many volunteers repaired the damage and the reserve recovered admirably.

Peter gave a general rundown on the wild life which is present and the facilities for visitors to watch that wild life. Problems arose with wooden hides in the early days – the local hooligans set fire to them. The solution was to use steel structures which are less combustible!

An important part of the work of the Reserve is to welcome parties from Primary Schools between March and July, and some 30 parties visit each year. The children love to do pond dipping and enjoy watching the bird life and identifying plants. There is even a children's club with its own garden. The Egg hunt at Easter is also very popular. In the summer a bird Fair is held which attracts many visitors.

Special features are the extensive lagoons where water birds breed and visiting immigrants stay and feed. A number of small ponds, especially for dragonflies, were established and were, sadly completely wrecked by the flood. These are now operating successfully again.



Little egrets  
Photograph by Barbara Murphy

They have a harvest-mouse breeding programme which allows many animals to be released into the wild. Many perished in the flood but numbers are building up again. A large plot of land is set aside for plants which set seed and provide for food for small birds in the winter. This hot dry summer has spoilt this year's crop somewhat.

This is a wonderful facility which is within the Leeds boundary and well worth a visit. It is open Wednesday, Saturday and Sunday and most bank holidays.

***Robin Jakeways***

## **Summer visit to Beamish Open-Air Museum**

Even though it had been recommended by people whose judgement I trust, I approached the idea of the trip to Beamish with some reservations. I feared that it would be too closely tailored to the needs of school groups or, even worse, that it would have a strong element of 'Mary Poppins'. I need not have worried. The whole experience was both rewarding and informative. The 'immersive' part of the Beamish experience is very well handled and (for the most part) it avoids the other pitfall for centres of this kind; that of trying to cram too many interesting artefacts into too small a space. Indeed the large area it covers means that the big crowds (and on the day we visited the large number of school trips) was not a problem. Also, the variety of 'themed areas and displays' (the 1900s town, the pit village, the farm, Pockerley Old Hall, the colliery, the tramway etc.) meant that there was something for everyone. However, the thought of a 1960s village as part of a museum made me feel very old. I found the chance to chat to those involved in guiding and in the re-enactments particularly helpful. For example, I had never really comprehended the scale on which cheap tallow candles once needed to be produced. At the colliery, for the walk into the drift mine, since I was not a 'school party', I went straight to the front of the queue and was in a little group of three. There followed a most interesting discussion with the ex-miner who showed us round. Beamish also gave me things to puzzle over and think about later. I still do not understand all of the iconography of the painted panels in the Masonic Hall or that of the

medieval fish-man carving (I think equivalent to a green man carving) in the parish church. However, I am sure that the experience of sitting in the box pews and contemplating doing that for a half-hour sermon was ‘good for my soul’. The excellent fish and chips in the pit village shop were purely a bonus. I will go back. It was well worthwhile and there is still a lot I did not have time to see.

**Richard Bushby**

***The Under-Appreciated Burden of Viruses in Cancer Adrian Whitehouse***  
20 September 2018

The octopus may seem to be an odd choice with which to introduce a talk on viruses but, according to a recent paper in the journal *Progress in Biophysics and Molecular Biology* (Steele et al., 2018, Vol. 136; pp. 3-23), this particular cephalopod owes its evolution and its exceptional intelligence to the arrival of viruses that were brought here on comets during an event in Earth's evolutionary history known as the Cambrian Explosion, just over 500 million years ago. According to this hypothesis, the genetic material of these viruses became inserted into that of the ancestor of the octopus and triggered its evolution.

Whilst this proposition is certainly interesting, it remains highly speculative. What is not speculative however is that viruses can cause far more malign effects than that bestowing the octopus with intelligence. For whilst it is today well known that radiation and carcinogenic chemicals such as those found in cigarettes are causes of cancer, the role of viruses as oncogenic agents is far less well known.

For an organism to grow, heal and replace old tissue its cells must be able to divide. Normally this process is so well controlled that, in just one minute, some 300 million old red blood cells can be replaced by new ones. But sometimes – often due to the accumulation of genetic faults over the course of time – this tight control over cell division is lost and cells begin to divide uncontrollably giving rise to a cancer. While this can be caused by certain genetic mutations, or influences arising from lifestyle such as obesity or cigarette smoking, the role of infectious agents such as viruses in triggering this loss of control has often been overlooked.

Yet, as Adrian Whitehouse, Professor of Molecular Virology in the Faculty of Biological Sciences at the University of Leeds explained, of the 14 million new cancer cases that arise each year, 15.4% are due to infectious agents such as viruses. Deriving their name from the Latin term for poison, viruses are simple structures consisting of some genetic material encapsulated within a shell made of proteins. They are so simple that they can only replicate by entering the cells of a host organism – plant, animal or bacterium – and then hijacking the molecular machinery of the host cell to make new virus particles.

Viruses can cause a wide range of diseases ranging in severity from the common cold to AIDS, but their role as cancer-causing agents was first suggested in 1909 by the scientist Francis Rous who observed that, when tumours on the chest of Plymouth Rock hens were

transplanted into healthy chickens, these animals subsequently developed cancer. Two years later Rous showed that the disease was caused by a transmissible agent and suggested that this was a virus. Although Rous' findings were not immediately accepted, researchers in the 1930s identified other types of oncogenic virus in rabbits and mice, and in 1964 the first human tumour virus was identified by Michael Epstein using the electron microscope. This was the Epstein-Barr virus which is more commonly known for causing glandular fever but can cause Burkitt's Lymphoma. Since then, another six types of human tumour virus have been identified including Hepatitis B and C virus, Human Papilloma Virus and the most recent one, the Merkel Cell Polyoma Virus which was found in 2008 using a powerful new automated method in molecular biology which is able to analyse and quantify the activity of thousands of genes.

Other than their ability to cause tumours, these viruses have little in common. They do not belong to a single family and differ in many ways including whether their genetic material is based on DNA or its molecular cousin, RNA. The ability of these viruses to cause cancer is also something of an evolutionary puzzle, for inducing a terminal disease in the host organism hardly seems conducive to enhancing the spread of the virus. Yet as Professor Whitehouse explained, these cancers are often a side effect of infection by the virus. Most of these viruses establish chronic life-long infections and only a small proportion of individuals infected with them will develop a cancer because this process is dependent upon a number of co-operative events. While most of us may well be infected with Epstein-Barr virus, for example, the probability of us developing Burkitt's lymphoma is quite low.

There are two ways in which these viruses cause cancers. The first is a direct effect in which, having infected a host cell, the virus expresses specific proteins coded within its own genetic information which then interfere with control of growth of the host cell. The second way in which viruses cause tumours is more indirect. Here, the cancer arises as a result of inflammation, oxidative stress or immunosuppression occurring in response to the infection. How then do we address this challenge? One successful example of how this has been done is the production of an effective vaccine against the Human Papilloma Virus. Because this virus has only a relatively small genome it has proved possible to produce a modified version of it which, though it retains the protein shell, lacks any genetic material and therefore cannot replicate. Known as a virus-like particle, this can be used as an effective vaccine against HPV which is now routinely offered to girls aged between 12-13 years old and as a result of which the incidence of HPV infection in women aged 16 to 21 decreased by 86% in the period 2010-2016.

Unfortunately however, this approach cannot be used for every type of human tumour virus and alternatives are needed. One example is the Kaposi's Sarcoma Associated Herpes Virus (KSHV) which is the most common opportunistic infection following infection with HIV and is now a major problem in the developing world, particularly in sub-Saharan Africa. Because KSHV has a much bigger genome, the approach of developing a vaccine using virus-like particles as has been done for HPV is not feasible but basic research of the kind carried out by Professor Whitehouse and his team into the molecular mechanisms by which these larger viruses replicate themselves and activate their own genes is raising the hope that a new generation of therapeutic agents can be developed which specifically target these viruses.

In 1980, the World Health Organisation issued an official declaration that smallpox had finally been eradicated. Although not a cancer-causing virus, smallpox had, for centuries, posed a major health problem and though formidable challenges yet remain, the talk by Professor Whitehouse gave cause for optimism that one day the WHO may issue a similar declaration for cancer-causing viruses.

### **Kersten Hall**

#### ***Awake Brain Surgery – A Rubik's Cube within a Rubik's Cube Ryan Mathew***

*17 October 2018*

To describe the human brain as a Rubik's cube within a Rubik's cube is a memorable way of describing what is, without doubt, the most mysterious object in the known universe. Just exactly how our memories, beliefs, dreams and sense of self are bound up with this 3lb jelly-like lump of neurons encased within our skull continues to elude both science and philosophy. And this also poses a much more practical – and formidable problem – for neurosurgeons when dealing with cancers of the brain. For while cancers in other organs such as the liver and lung can often be excised by surgical intervention, the physical removal of a brain tumour risks damage to other parts of the brain resulting in serious long-term consequences for the patient.

To address this problem, Ryan Mathew, Associate Professor and Honorary Consultant Neurosurgeon at Leeds General Infirmary, has been pioneering a technique known as 'awake brain surgery' in which the patient remains conscious during part of the procedure and the effect of the application of electrodes to different parts of the brain upon the patient's sensory and motor functions such as speech (or even being able to play the guitar) are monitored. In this way, it has proved possible to identify and locate functional regions of the brain and therefore avoid damage to these regions during excision of the tumour.

But unfortunately, simply removing the tumour is often not enough. Brain tumours can show aggressive metastasis to other organs and a surgeon can never be absolutely sure that they have removed every trace of the cancerous tissue. In addition, the formidable biological complexity of brain tumours means that no two cancers are ever quite the same. New chemotherapeutic agents therefore need to be discovered not only as an alternative to surgical intervention but also so that patient-specific drug regimes can be developed. To this end, Ryan's research team have, through the action of specific chemical treatments, been able to successfully induce tumour tissue to revert to become a special type of cell called stem cells which have the very special property of being able to differentiate into any kind of cell such as liver, heart, lung and liver. Again, by using a special cocktail of chemicals, these tumour-derived stem cells can then be coaxed into developing into what Ryan called 'mini-brains'. These 'mini-brains' can then be used as targets upon which to test new candidate drugs for chemotherapy.

As Ryan explained, there is an urgent need for the development of novel strategies with which to treat brain tumours. For while an opening slide gave a graphic depiction of how

survival rates for most other cancers have been steadily improving over time, the prognosis for patients with an aggressive and metastatic brain tumour remains poor. Yet, thanks to research such as that described by Ryan in what was a fascinating evening, there is cause to be optimistic that the outlook for patients in future may be far more hopeful.

### **Kersten Hall**

#### **Annual Priestley Lecture**

**Wilson Armistead (1819-1868) – A story of religion and activism Joe Williams**

*22 November 2018*

Joe began by introducing his audience to the voice of Olaudah Equiano, the late eighteenth century former slave and writer, answering questions from the young Horatio Nelson. Joe went on to explain his own Leeds/West Indian background and sources of inspiration. His current work with ‘Heritage Corner’ explores African heritage in Yorkshire and challenges the ignorance and misrepresentation of Africans and their history and culture, now and in the past, through ‘Black history’ walks and other projects linking local history with the anti-slavery movement.

The focus of his talk was Wilson Armistead, the Leeds merchant who remarkably chose to devote his time and energy to countering the commonly accepted stereotypes of the African people and denouncing the horrors of slavery. Born in 1819, Armistead was brought up in the Quaker enclave at Water Hall south of the river, and inherited the family seed-crushing and mustard business. When he married in 1844 he moved to Virginia Cottage (now part of Lyddon Hall on the Leeds University campus), which its previous owner, the tobacco dealer Thomas Boyne, had named after the American source of his wealth, based on slave labour. Was this a trigger for Armistead to take up the abolitionist cause? He joined the Anti-slavery Association and was in touch with his contemporary, the Leeds Quaker Thomas Harvey, who helped to bring an end to the cruel apprenticeship system on plantations in the West Indies.

He was perhaps influenced too by his friend Richard Oastler, who fought a fierce battle on behalf of the factory children. Neglecting his business, Armistead spent his time studying and writing, and in 1848 published his massive work ‘A Tribute for the Negro’ (some 600 pages), passionately denouncing slavery, refuting concepts of a correlation between intelligence and colour, defending African culture and offering moving biographical accounts of individual slaves. He communicated with several American activists, former slaves who wrote and spoke in the abolitionist campaign – Frederick Douglass, Henry ‘Box’ Brown, Ellen and William Craft. He visited America and invited them to come to Leeds as speakers and stay with him in his home. It was said of him that ‘few English gentlemen have done more to hasten the day of the slave’s liberation’. His pleas for justice, humanity and freedom had a powerful impact both here and in America.

Joe Williams set Wilson Armistead’s story in the wider context of the past civilisations of Africa – the Nubian, the Egyptian, the Mali and the Songhai Empires, with their distinctive cultures and centres of learning – the memory of which had been deliberately effaced by

those who exploited and colonised the land. The role of Christianity in devaluing traditional African culture was also touched on. He pointed to the lingering presence of old prejudices and misrepresentations of African people – as in the sculpted frieze at 18 Park Row, with its degrading image of a negro slave – and the lack of recognition for outstanding black figures like the impresario Pablo Fanque. The aim of his black history walks (for which he recently won a ‘Points of Light’ award) is to raise awareness of issues like these.

This was a rich, emotive and thought-provoking lecture. In the question session afterwards the suggestion was made that the Society should consider erecting a blue plaque to Wilson Armistead at Lyddon Hall, and one to Pablo Fanque in St George’s Field.

### ***Eveleigh Bradford***

#### **AGM & Dinner – *The Leeds Waits***

*6 December 2018*

After the Society’s Christmas dinner, we were entertained by the Leeds Waits, led by Alan Radford. Town waits, he explained, were civic employees, required to act as the mayor’s minstrels on ceremonial occasions. The earliest civic minstrels were established in the later 14<sup>th</sup> century, and Leeds had its own waits by 1530-31; they continued in this role until, along with town waits everywhere, they were disbanded after the Municipal Reform Act of 1835. Re-established by Dr Radford in 1983, the Leeds Waits now perform widely at predominantly historic venues and occasionally for the Lord Mayor. For further information see <<http://www.leedswaits.org.uk/waits.htm>>.

The three Waits then played a program of English and continental music, mainly from the 16th, 17th and 18th centuries and much of it based on the celebration of Christmas. This was interspersed with short introductions concerning the instruments, which included various double-reed pipes, recorders, harp, hurdy-gurdy and cittern. Of particular interest were the Flemish bagpipe, as depicted by Breughel, and the rackett, which contains a long multiple bore in its very short body, enabling it to produce much lower notes than could be expected from such a small instrument.

There was some (vocal) audience participation, and one suspects that, given a little encouragement, a few members of the audience might have been tempted to dance. But no-one seemed dissatisfied to listen, and we were entertained with a splendid program of music - some, like Greensleeves, well-known, and some quite new to most, evoking a bygone musical age of great interest.

### ***Richard Rastall***

## **Reports received during 2018 on Grants awarded by the Society**

### **Drawings by Imtiaz Dharker**

*£300 to Nima Poovaya-Smith towards costs of framing drawings by Imtiaz Dharker*

Sense of Line: Drawings by Imtiaz Dharker showed from 10 July to 2 August 2017 at Project Space, University of Leeds. It was a great success, attracting 898 visitors. It was selected by Artists Newsletter as one of their top ten exhibitions to attend in that particular period. The LPLS grant made an extremely useful contribution towards the framing costs.

Anyone who has read Imtiaz Dharker's award-winning poetry, (she won the Queen's Gold Medal for Poetry in 2014) would be familiar with some of her pen and ink drawings – since she provides the images for the anthologies herself. However, what is not immediately apparent is the range and scale of these drawings and the very varied themes that they cover. She has been widely exhibited internationally, yet in the popular imagination, in this country at least, she is best known as a poet.

The five postgraduate students on my placement programme were already familiar with Imtiaz's work through an earlier Alchemy project - *The Haunting: Ghosts of Every Shade*, displayed in The Leeds Library in October 2016 and also supported by Leeds Phil and Lit Soc. *Sense of Line* evolved naturally through conversations with them, Professor Abigail Harrison Moore, Dr. Helen Graham and Sam Belinfante from the School of Fine Arts, History of Arts and Cultural Studies.

The students and I worked together as co-productionists. They have played an important role in the interpretation, installation and evaluation of the project. When they were first introduced to Imtiaz – they were thrumming with excitement. The preview did not include a speech by Imtiaz. Instead she responded to five, thoughtful, probing questions prepared by each one of the students on a range of subjects relating to her practice. An important focal point of the exhibition was five powerful drawings Imtiaz produced in response to the role played by Sikh soldiers in the First World War.

*Sense of Line* has been wonderfully well received by very varied audiences including members of the Sikh community. The preview, salon and workshops attracted people to the School, who had never actually visited the University before. We cunningly managed to open the exhibition early so that it could be used as a setting for photographs on graduation day. Three generations flooded the space – students with their parents, grandparents and siblings. Somehow, the works seemed to provide the perfect context for a day that was filled with excitement and joy for the graduating students.

***Nima Poovaya-Smith***

### **Thomas Chippendale Tercentenary Exhibition**

*£750 to the Chippendale Society towards cost of booklet for exhibition*

The year 2018 has been celebrated nationally as the tercentenary of the birth in Otley of Thomas Chippendale Senior. The Chippendale Society took the lead in collaborating with Leeds Museums & Galleries on a major showcase exhibition entitled *Thomas Chippendale 1718-1779: a Celebration of British Craftsmanship and Design* at the Museum from 2<sup>nd</sup> February to 9<sup>th</sup> June.

The Society provided the curatorial input and acted as the conduit for the finance, and the Museum administered the exhibition and provided the venue. There were nearly 100 exhibits representing every aspect of the great furniture maker and designer's life and work, including many great masterpieces and some newly attributed works. The exhibition attracted nearly 40,000 visitors and received considerable praise both from the general public and from specialists. The total cost of mounting it was £112,000: grants were received from over 18 different organisations, corporate bodies and individuals.

In addition the Society published both a popular guide to the exhibition which sold at £5.00 (3,000 copies, now sold out), and a scholarly, fully illustrated catalogue at £65.00. The initial run of the latter of 400 copies was sold out before the exhibition finished and has been reprinted. It has become recognised as the most up to date and definitive publication on the subject. Separate funding was received from sponsors who wished to support this aspect of the venture, including the Leeds Philosophical and Literary Society.

The exhibition was also the venue for a major international Symposium co-organised by the Society and the Furniture History Society who later dedicated its entire annual Journal to publishing the papers many of which contained the fruit of much new research and interpretation. The nation-wide Chippendale tercentenary (marketed as *Chippendale300*) which followed on from the exhibition has also been judged to be a considerable success, with some 16 different organisations participating, and it has done much to raise public awareness of the achievements of the Otley-born furniture maker and designer.

***James Lomax***

### **Leeds Cradle of Innovation**

*£1000 to Leeds Sustainable Development Group towards cost of publication of book*

The grant went towards the costs of design and production of a book published in June 2018: '*Leeds: Cradle of Innovation*'. The project, led by Rachael Unsworth and Steven Burt, was also supported by more than forty other companies and organisations in the city.

It is the first publication to bring together innovations emanating from Leeds across the centuries. The aim is to show off about Leeds to the wider world and bring into the limelight many innovators who deserve to be better known. Immediately after the launch event copies were requested by the team courting Channel 4 to locate in Leeds.

‘Spirits of Leeds’ starts with Ralph Thoresby’s historical work and continues with a wide range of engineers and entrepreneurs of the industrial period, pioneers of film making and also some prominent medical and social reformers. ‘Leeds Legends’ features long-lived organisations and companies. The Phil & Lit is amongst them, with its own double-page spread, and there are mentions of the Society in several other profiles elsewhere in the book, including within the feature on the Mechanics’ Institute. Other notable ‘Living Legends’ given prominence are AW Hainsworth, Vickers Oils and Braime Pressings.

Members will be familiar with many of the historic innovators but some of the more recent successes may be less widely known. In ‘Beyond 1,000 Trades’ there is a wide range of creative people, novel ideas and products that bring the story right up to date. The main sections cover digital innovations, green businesses, science and spin-outs, culture, social entrepreneurs and remaking of the South Bank (in which the Leeds Sustainable Development Group has been much involved since it was founded in 2010). Having started with the first steam locomotive, we end with the prospect of HS2.

The book concludes by drawing lessons from this survey of so many different kinds of effort to solve problems, create value and enhance wellbeing.

**Rachael Unsworth**

**On The Spot: The Yorkshire Red Books of Humphry Repton, Landscape Gardener**  
*£750 to New Arcadian Press to assist publication of book*

The grant assisted in the production by the New Arcadian Press of the book co-authored by Patrick Eyres and Karen Lynch. This has already been acknowledged as a major contribution to the nationwide Repton Bicentenary scholarship (2018), as well as to the landscape history of Yorkshire. It is an ambitious publication, with a format of 29.7 x 23.3 cms containing 197 pp and 165 illustrations

Humphry Repton (1752-1818) was the self-appointed successor to Lancelot ‘Capability’ Brown as Britain’s leading landscape gardener. He uniquely combined art and design through the Red Books in which he bound his landscape proposals. Each one was handwritten in copperplate and illustrated with watercolours that theatrically comprised ‘before’ and ‘after’ views. The six extant Red Books for the county are reproduced – Armley, Harewood, Mulgrave, Oulton, Owston and Wentworth Woodhouse – along with the most up-to-date research on Repton’s commissions, as well as a festival of associated imagery. A further site, Langold, has been re-discovered and the Harewood Red Book, which was split up in the 1950s, has been re-constructed in the pages of the book. Unfortunately three of the nine Red Books are currently lost – Bessacre, Langold and Rudding.

The research has been further disseminated because the book has formed the basis of a series of 13 lectures and conference papers during 2018. Four of these have been in Leeds, including the Heritage Open Day lectures at Oulton Hall and Armley House. Others have been in York, Wakefield, Doncaster, Bolton Abbey, Richmond and at the Ilkley Literature

Festival, as well as at the Repton conferences at the Sheffield Botanic Gardens and the Garden Museum in London. In addition, study visits have taken place at Armley House, Mulgrave Castle, Langold Manor, Oulton Hall and Wentworth Woodhouse, as well as to Broomhall Manor, which was Repton's only commission in Scotland. The momentum is continuing throughout 2019.

Extract from the Review in Country Life, 14 November 2018, by Steven Desmond:

“... For once, we can judge these attractive ideas from a reading of the complete text, with the full set of illustrations in the right order – an exceptional treat. This marvellous achievement is the work of Karen Lynch, whose excellent research shines forth from each of her introductory essays, and Patrick Eyres, who performs his usual mind-broadening task of setting these places in their historical and political context. The New Arcadians have been teaching us pleasantly provocative lessons for many years and this superb publication is no exception. Merely to have persuaded the various owners to agree to participate in the exercise is a triumph in itself ...”

### ***Patrick Eyres***

#### **William Gascoigne Plaque**

*£400 to Leeds Civic Trust towards cost of plaque*

Leeds Civic Trust was delighted to unveil a blue plaque on 23<sup>rd</sup> March 2018 to remember the life and contribution of William Gascoigne, the early astronomer who invented the micrometer and telescopic sight, paving the way for precision astronomy, and whose inventions remained relevant right up until the 20<sup>th</sup> Century. Gascoigne, a resident of Middleton, died at a young age in the English Civil War and most of his papers were destroyed or lost at the time, so relatively little is known about his life, save for the fact that he lived at New Hall in Middleton – our plaque was unveiled on a parade of shops near the site of this building. The wording of the plaque reads:

WILLIAM GASCOIGNE

Pioneer of modern precision astronomy, inventor of the telescopic sight and the telescope  
micrometer, lived at New Hall on this site.

He lost his life in the English Civil War at the age of 32.  
c.1612-1644

It is largely thanks to David Sellers, an amateur historian and astronomer, that the unveiling came about. His book on Gascoigne is in large part the reason why the man has been brought back into the public's consciousness. David Sellers unveiled the plaque and we were delighted to be joined on the day by local MP Rt Hon Hilary Benn who also spoke about Gascoigne and the esteem in which he was held whilst he was alive.

This unveiling was made possible thanks to the generous sponsorship of a number of organisations and individuals but principally due to the Phil and Lit, who kindly donated £400 towards the costs of the plaque. Funding was also secured for the reception at the Belle Isle Working Men's Club, the information booklet produced by the Trust about the subject of the plaque, and the time of a professional photographer who recorded the occasion.

The manufacturing cost of the plaque was £355.70, but we seek to raise £850 for our plaques scheme. This covers the costs to the Trust of maintaining the plaque in perpetuity, including its repainting and in some cases replacement, so the Phil and Lit fully funded the cost of the plaque and made a contribution towards its on-going maintenance

### ***Martin Hamilton***

#### **Leeds PeaceJam Conference**

*£600 to Rehana Minhas in support of conference*

The two day Leeds PeaceJam conference was held at Leeds Trinity University on Saturday 25<sup>th</sup> and Sunday 26<sup>th</sup> November 2017 and was a resounding success. The conference was attended by over 200 delegates. 160 delegates were secondary school students mainly from Leeds Schools but also from two Bradford schools and the Mount in York.

Twenty mentors were recruited and underwent two day training to act as facilitators for the ‘family groups’. The family groups brought together students from different schools assigned to two mentors for the two days and in addition to team building activities, it enabled the students to discuss issues raised in the main sessions about community cohesion, the conference theme. Mentors were recruited from the following universities: Leeds Trinity, Leeds University, Leeds Beckett, Bradford and York. School students were accompanied by staff, who were given the opportunity for professional development by PeaceJam leadership team members whilst the school students engaged in the Family groups. The two Emcees, Andy Brooks and Beulah Byron, kept the pace of the conference on schedule and upbeat with their talented contributions.

Mairead Corrigan Maguire, our Nobel Peace Laureate from Northern Ireland led the conference, sharing her experience and determination to find non-violent resolutions to global conflict. She was accompanied by her aide Ann Patterson, who has experience of working in war torn areas of Rwanda, Uganda. Both Mairead and Ann brought their grandchildren, Jack Maguire and Grace to participate in the conference. PeaceJam Foundation in Denver US was represented by the co-founders, Dawn Engle and Ivan Suvanjieff as well as Alan Schwartz , a Human Rights lawyer and his wife Gail Schwartz who has served as a Senator in the US. The Lord Mayor of Leeds, Councillor Jan Dawson, addressed the conference thanking Mairead Maguire for her address and explaining the synergy between the values of Leeds City Council and that of Leeds PeaceJam. Mairead Maguire was presented with a limited edition of an artists print of Kirkstall Abbey.

On the Saturday young people had the choice of 11 workshops led by passionate advocates of social justice, equality and peace; Mairead was able to join a number of workshops. The evening on Saturday ended with a group who had worked with songwriter and singer Christella Liras during the workshop session, singing a song that the group had composed.

On Sunday the day began with a ceremony of inspiration led by Mairead Maguire. A local artist, Maria Sandle had created a tree of inspiration using natural materials. Students wrote

what inspired them on paper leaves or on tags attached to real leaves which were hung on the tree and on ribbons across the walls of the auditorium. Students had a choice of 9 Action Projects to choose on Sunday afternoon. Action projects involved off site visits and transport had been arranged to take students and their mentors to the Action projects. The idea of the Action Projects was to show case Leeds based voluntary and charitable organisations which schools can engage in for their PeaceJam Action Projects during the year.

The evaluation forms for the conference helped to establish a baseline of the students' prior knowledge of the conference theme and to register the impact of the conference on their understanding of issues of social justice, equality and peace. Early perusal of the conference evaluation is very positive.

### ***Rehana Minhas***

#### **Royal Armouries 'The Mess'**

*£400 to The Royal Armouries to assist with furnishing space for young families*

Leeds Philosophical and Literacy Society kindly supported the Educational context of 'The Mess', a new dedicated lunch room used for schools and pop-up learning programmes for young families, at Royal Armouries Museum, Leeds.

The project was required because the original space 'Jesters Yard' a dedicated family learning-through-play space was no longer serviceable to fulfil its original intentions. The space was in poor condition and some visitors misunderstood the purpose of the facility. Informal feedback from Visitor Services suggested that it was only busy in the summer holidays. Pedagogically, it was not possible to demonstrate that Jesters Yard, as it was, delivered family learning in which parents/carers were supported in working with their children to achieve learning outcomes. The museum was also lacking a dedicated area for school lunches (relying on a Picnic Area for all visitors on Floor 4, with limited covers).

We are pleased to report that the space has been now repurposed and re-fitted to create 'The Mess' our new educational resource. The space is being successfully being used as a dedicated lunchroom and for pop-up learning programmes for young family audiences, particularly for anything involving 'messy play'. Although we anticipated there would be a strong requirement for the space, it has proved to be more popular than expected (approximately 300 visitors used the space each week in November).

On behalf of the Royal Armouries, we would like to extend our thanks to the trustees of the Leeds Philosophical and Literary Society, for supporting the educational context of 'The Mess'. This is just the first stage in the development of an Early Years programme at the museum, one which will be integrated within the lifelong learning provision within our museum and galleries.

### ***K L Smith***

## **St Peter's Singers: Penthos Project**

*£1000 towards the costs of the first performance of the Penthos Requiem*

The Penthos Project of St Peter's Singers supported the writing and first performance of a new work, Penthos Requiem, which came from a collaboration between two members of the choir – Poet Hannah Stone, and Composer, Matthew Oglesby. The work was conceived to commemorate the centenary of the First World War Armistice, the Greek word “Penthos” meaning “mourning” or “joy-bearing grief”.

The Penthos Requiem is scored for vocal soloists, four-part choir, orchestra and organ. The Requiem text is original poetry based on early Syrian theological writings and constructed to fit within the structure of the Christian Mass for the dead. The musical soundscape is enriched by such Eastern Orthodox traditions as tolling Russian bells and Serbian choral chant. The 40-piece orchestra was assembled by the Orchestra Leader, Sally Robinson, from colleagues in the National Festival Orchestra, coming from many parts of the country for the rehearsal and performance.

The concert itself, at St Michael's Church in Headingley on 27 October, was regarded as a huge success, both in attracting a large audience (230 estimated) across a large age-range, and in the enthusiastic performance feedback of a large-scale, new choral requiem which it is felt will be a significant contribution to modern choral repertoire.

In addition to the contribution of the concert to the Remembrance events, the choir was also able to perform *a cappella* sections of the work at other occasions and venues across the city, in collaboration with Leeds Council:

- Light night - which attracted an estimated audience of 100 to the Minster
- Opening of the peace-making display at the Brodrick Gallery where the work was heard by an estimated audience of 150
- Light for Leeds Inter-Faith event at Kirkstall Abbey, with an estimated audience of 50.

Other outcomes of the performance have been the recording, which will be used to assist the search for a publisher and to further promote the work itself and future performances; an enhanced choir promotion from the development of a dedicated Penthos website visited by over 950 unique visitors, and a high use of social media (Twitter and Facebook), which no doubt assisted in reaching a younger audience. For our “traditional” promotion we produced 1500 flyers which were distributed by Leeds City Council, and advertisement in North Leeds Life. We were pleased that our fund-raising had been successful and allowed us to break even financially.

***Jackie Coates***

## **History of Leeds Pals Battalion**

*£500 towards publication on the history of the Leeds Pals battalion, written by Leeds Museums & Galleries volunteers.*

The Leeds Pals Handbook was published in November 2018 by the History Press, in an initial run of 500 copies to be sold by Leeds Museums & Galleries. We offered an initial pre-order discount and sold 70 copies through that. The book is currently for sale at Leeds Museums & Galleries sites, as well as major retailers and online book suppliers.

The book was formally launched by Canon Sam Corley at the Leeds Minster on Friday 9 November, with an audience of 53 people – many of whom were relatives of people discussed in the book. Volunteers from the group spoke a little about the project, as well as reading a poem written by Dorothy Una Ratcliffe and dedicated to the Leeds Pals. Visitors were treated to tours of Leeds Minster and its WW1 memorials by colleagues there.

Early reviews of the book include:

“I was delighted to find my uncle, Robert Brown (k/a Barraclough) Rgt no. 640, 17th (Service) Battalion (2nd Leeds) listed on page 149 of “The Leeds Pals” ... The publication is both enjoyable and informative – thank you.”

“My wife and I really enjoyed the book launch at the Minster last Friday, so thank you. I've just finished reading the book and have thoroughly enjoyed it, especially the chapter on the Leeds Bantams.”

It is clear that the book is already being enjoyed by a wide variety of people in Leeds.

## ***Lucy Moore***

### **Performance of Twelfth Night at Home Farm, Temple Newsam Estate**

*£1000 to Front Room Productions to support above*

The grant was used to support the rehearsal and ten performances of Front Room Productions' abridged and accessible promenade version of Shakespeare's *Twelfth Night* at Home Farm (Temple Newsam Estate), transported into a modern day setting, delivered in the original tongue.

The project was delivered as planned and performed to an audience of 518 people of all ages and backgrounds across two gloriously sunny weeks in August. A key aim was to promote engagement with literature and the arts by taking a universal aspect of our culture (Shakespeare) and giving it a regional identity. This aim was achieved through the use of a well-known site at Temple Newsam, and incorporating a regional identity specific to Yorkshire through the use of costume, design and plot elements.

We also aimed to engage local audiences from East Leeds in particular, who were encouraged to attend through discounted tickets, and were made aware of the performance through channels such as East Leeds Magazine, Chapel FM, and a door-to-door flyer

campaign. This objective was successfully achieved, with 13% of our audience using the Local Resident Discount code, and 18% overall hailing from within the same post code as the venue. We also wanted to encourage those who might not typically engage with Shakespeare and the arts to try something new by creating a fun and accessible, yet faithful production of *Twelfth Night*, as well as acting as an introduction for young people. The achievement of this aim is reflected in some of the following audience feedback:

- ‘First time seeing live Shakespeare. Amazing, engaging, brilliant cast and location’
- ‘My children’s first time and it’s really helped them to understand’
- ‘It wasn’t the first time I’ve seen Shakespeare, but it was the first time I’ve enjoyed it!’
- ‘Totally changed my perception of Shakespeare, I want to see them all!’

We also intended a positive impact on mental health and wellbeing, which can be gleaned in the following audience comments:

- ‘Lots of fun, felt like I had a great night out and leaving with the tunes in my head’
- ‘A brilliantly entertaining and heartwarming show – MORE!’
- ‘Love Shakespeare but I think this is the best production I’ve seen in years’
- ‘Didn’t know what to expect but enjoyed it so much, it was fabulous’
- ‘It was fab, you are all fab and I feel like I’ve just been at a party’

In terms of creative development, this show has been an incredible opportunity for Front Room Productions, an emerging Leeds-based theatre company, to forge a lasting partnership with Temple Newsam Estate, with the prospect of bringing another show to the farm in Summer 2019. It has also allowed us to continue building our reputation across Leeds for innovative site-specific theatre, and develop an audience base in the East of the city. In all, both our artistic and developmental aims were met, and a huge amount of enjoyment was had both by our audiences and by the creative team.

#### ***Alice Barber***

#### ***Così fan tutt(i) at Sunny Bank Mills, Farsley***

*£1000 to ‘Constella Opera Ballet’ and ‘Trouble at Mill’ for a close-up, unconventional reinterpretation of Mozart’s Così fan tutte.*

The performance took place at Sunnybank Mills, a disused textile mill in Farsley. Through the collaboration with Trouble at Mill, an organisation that regularly set up events at Sunnybank Mills, we aimed to bring opera to new audiences, in an area that rarely sees classical music events. Devised by Davide Levi and Anna Whyatt, the production featured two narrators and image/video projections, reimagining the story of *Così fan tutte*, condemning the sexual harassment and gender inequality in the original work.

The audience could enjoy drinks and food provided by Trouble at Mill while watching the immersive performance. Without a proper stage and with the audience sitting very close to the performance area, the singers were free to move around and interact with the audience, making this a quite unconventional opera performance. Over 120 people attended, and I believe the final standing ovation was a clear sign of the huge success of the evening.

The singers were all talented, emerging performers, who undoubtedly gained very much from the opportunity to perform a major work of the standard operatic repertoire, with orchestra. The grant was used to cover part of the fees of the young singers involved in the production – the rest of the fees were covered by ticket sales.

The grant, together with ticket sales and donations from two individuals allowed us to break even. We are extremely grateful for the Society's support, without which we couldn't have made this a sustainable project for our young singers.

### **Davide Levi**

#### **MathsWorldUK outreach activities**

*£500 to MathsWorldUK towards cost of a new exhibit for Science Fairs*

The long term goal of MathsWorldUK (MWUK) is to establish the UK's first mathematics discovery centre. The immediate goal of MWUK is to build exhibits towards establishing a touring mathematics exhibition to be hosted at discovery centres around the UK. Meanwhile MWUK are participating in mathematics festivals.

The grant given by the Leeds Literary and Philosophical Society was for £500 towards a 'pendulum waves' exhibit. The exhibit (shown below) was built by Science Projects, a company based in London, and it was used for the first time as the centrepiece of the MWUK stand at the ATM/MA Maths Festival in the STEM Centre in the University of York on Saturday, 15 Sep 2018. There was great interest in the exhibit shown by the visitors. The next event where it will be used will be the Science Festival organised by the Leeds Literary and Philosophical Society in 2019. There will be others festivals around the country later in the year.

The 'pendulum waves' exhibit complements the equipment that MWUK already has on the theme of 'Mathematics makes Waves'. It is important to continue to increase the exhibit collection of MWUK to maintain the momentum of the project, and to build the visibility of the organisation itself.



Working with ATM/MA at the festival meant that the impact of the MWUK maths activities reached beyond the people we met on the day, to teachers in the surrounding area. We were pleased to be part of this festival along with other excellent maths publicists.

The total cost of the exhibit was £5500. We were also able to get a grant for £600 from the Institute of Mathematics and its Applications. The balance was paid for mainly from crowd funding but also partly from an anonymous grant from a donor in the USA.

### **Geoffrey Wain**

