

# The Workdiaries of Robert Boyle

### **Editorial definitions**

### 'Workdiary'

We have given the title 'workdiary' to a characteristic type of document surviving among the papers of Robert Boyle. These are characterised by the following features:

- They comprise collections of discrete nuggets of information, entered serially and often numbered either at the time of composition or retrospectively. In this, they differ from material in the Boyle archive which comprises individual notes written or copied piecemeal, or continuous sections of text. They also differ from the notebooks in which Boyle wrote drafts and memoranda, particularly in his later years. For the rest of the content of the Boyle archive, see Hunter (1992).
- The workdiaries often have quite formal titles in the form 'Diurnall Observations, Thoughts & Collections' (Workdiary 1), 'Memorialls Philosophicall' (Workdiary 6) or 'Promiscuous Experiments, Observations & Notes' (Workdiary 21), sometimes combined with a date, as 'Begun this First day of January 1655/6' (Workdiary 14).
- The content of the workdiaries varies more than their format, in that this
  format was initially used for literary obiter dicta but was later used for
  observational and experiential notes. In other cases, especially Workdiary 22,
  it was used for extracts from books and in one case, Workdiary 28, for
  sections of text by Boyle.
- They are usually paper-books made up of folded foolscap leaves, though in three cases they comprise small notebooks: two of these are now bound as discrete notebooks, Workdiaries 18 and 33 (RS MSS 193 and 194), while one (Workdiary 27) has been bound into BP 44.

It seems likely that in Boyle's lifetime, they were kept as stitched paper-books or bundles of loose papers. They were probably first bound when the Boyle Papers were bound up in the 1850s.

### 'Entry'

Within the workdiaries, the units are 'entries', each of which comprises a discrete piece of text, most commonly a paragraph in length. That Boyle himself saw each of these as discrete is shown by the fact that in many cases they were given a separate number, either at the time of composition or later.

### **Organisation of the Workdiaries**

The workdiaries survive scattered in the Boyle archive, in the positions they were allocated when the archive was bound in the 1850s. We have placed them in a chronological sequence, allocating each a number.

#### Material not included

In defining what constitutes a workdiary, we have excluded the following, related types of document surviving in the Boyle archive or elsewhere:

Items recopied from workdiaries surviving elsewhere in the Boyle archive: for example, BP 26, fols. 78-89, is a set of notes including copies of entries from Workdiaries 19 (28-9), 21 (201, 213, 244, 587, 633-4, 641-4 and 711-3), 27 (14) and 36 (66-7), while BP 38, fols. 94-6, includes copies of entries 536, 613, 615, 692 and 706 from Workdiary 21. We have also excluded records of individual experiments or observations which are not part of a sequence, although they may derive from workdiaries now lost.

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- Notebooks of Boyle's containing memoranda rather than records of
  information. In some cases, for instance RS MS 43, there is an element of
  overlap between the genres, in that this contains some records among its
  memoranda: however, since it is predominantly devoted to memoranda, we
  have excluded it (conversely, in the case of Workdiary 33, the records of
  recipes, etc., are interspersed by memoranda which we have included).

### **Referencing System**

### Editorial numbering of the workdiaries

The workdiaries have been arranged in chronological order and given a number from 1 to 40.

### Editorial numbering of the entries

In many workdiaries, each of the entries was given a number, either at the time when they were written or retrospectively. Since these numbers were given to them by Boyle, we consider these the most satisfactory references for material in the workdiaries. We allude to them in the form 22-132, i.e., Workdiary 22, Entry 132. In some cases the numbering goes wrong, and we have corrected it: for instance, in Workdiary 21, entries 395-400 were misnumbered, while in Workdiary 22 a numeration error that began at 44 resulted in entries 67-76 being repeated (we have denoted the duplicate entries '67a', etc.) For consistency, we have added editorial numbering in cases where entries lack numbers: this applies to Workdiaries 1-11, 23-7, 30-5 and 39-40.

### Ordering of material within workdiaries

Where there is clear evidence that a workdiary has been misbound, we have presented the leaves in their original order (e.g., Workdiaries 9, 15, 26). In the case of Workdiary 33, a notebook used first from one end, then turned upside down and used from the other, we have presented the entries in the order in which they were apparently written. In certain cases (e.g., Workdiary 21) it has not proved possible to

reconstruct the history of the manuscript in a satisfactory way, and we have therefore followed the archival ordering.

A schedule of blank pages for each workdiary in which they appear is provided in the headnote to the workdiary in question. It has not seemed appropriate to reproduce these pages since they are generally completely blank. Very occasionally they show signs of wear, for instance BP 27, p. 112 (Workdiary 21) or BP 25, p. 84 (Workdiary 35). These will be fully visible in the reproductions of the relevant openings, as against pages, of the manuscripts in question on the Boyle website.

### Dating of workdiaries and entries

Some workdiaries include the date when they were commenced as part of their title: see workdiaries 1, 4, 6, 8, 12, 13, 14, 15, 16, 17, 20, 23, 24, 34, 35, 39. In other cases, entries were given authorial dates when they were written, while elsewhere we have tried to assign editorial dates to entries on the basis of their position in relation to dated entries, on the presumption that any entry that follows a dated entry must date from between the date of that and the date of the next dated entry. In some cases, hardly any or no entries are dated, and in these cases we have assigned an overall date to the workdiary on the basis of handwriting and other evidence.

#### **Archival references**

The workdiaries are preserved among the Boyle Papers at the Royal Society (except for Workdiaries 18 and 33, which are to be found among the Boyle notebooks preserved as part of the general manuscript sequence at the Royal Society, and Workdiary 26, which is in the Additional Manuscripts in the British Library). Each page therefore also has an archival reference denoting its position in the archive in which it is to be found. The overall archival reference for each workdiary is given in the introductory page of the workdiary in question, and each page break is then recorded in the text in square brackets. In the Boyle Papers, some volumes are foliated and some are paginated.

## **Transcription Policy**

### Spelling, capitalisation and punctuation

The content of each workdiary is transcribed in full. The text has been transcribed literally, retaining original spelling, capitalisation and punctuation; the ampersand has been retained. Long 's's and capital 'F's in the form 'ff' have been modernised and consistency has been imposed in the usage of 'u' and 'v' and 'i' and 'j', with the former being used for the vowel and the latter for the consonant in each case.

#### **Contractions**

Standard contractions have generally been expanded, though we have shown some latitude in this where Boyle's notes are in the nature of memoranda rather than finished notes. This is especially the case with recipes (see headnote to Workdiary 10). Where Boyle uses an initial letter only to denote a person, we have left this as it is, and have used a hypertext link to the Biographical Register to identify the person in question.

#### Catchwords

Catchwords have been ignored unless they fail to tally with the text that follows, in which case they form the subject of an editorial note in square brackets. Their use in the workdiaries is irregular, depending on the habits of the scribe responsible for the section of text in question. Where they occur, they comprise a single word.

### Marginalia

Marginalia are recorded prior to the content of an entry. An attempt has been made to differentiate marginal notes made at the same time as the entry from those added later.

### **Editorial Apparatus**

### Editorial 'headnotes' and 'entry notes'

Information about the individual characteristics of each workdiary is given in a 'headnote' at the start, including any complications over pagination or the numbering of entries. Each entry has been given an editorial 'entry note' detailing its date, handwriting and any unusual features about it.

### Biographical register

References to persons and authors named in the workdiaries are identified in the Biographical register. It also includes certain individuals who are not named but about whom sufficient information is given for them to be identified. Institutions such as the Royal Society are also included, as are characters in the romances from which extracts are given in the earliest workdiaries.

#### Placenames register

Places are included in the Placenames register according to two criteria. (1.) Places that require an editorial explanation or comment, such as 'not identified' for unknown places; an equivalent modern name for places which have changed their name; or additional geographical information for places regarded by the editor as not instantly recognizable. (2.) Places are included if they appear in the workdiaries in a non-standard spelling form or spelt in multiple different ways or in different languages. In each of such cases, the standard, modern spelling of the name is given, with all variant spelling form(s) provided in square brackets, e.g. 'Araja [Harraiya]', 'Breslau [Uratislavia, Vratisaviæ]', 'Cape of Good Hope [Cape of Bona Speranza]', 'Copenhagen [Coppenhagen, Hafnia]'.

The Placenames register therefore offers explanations of names that are difficult to identify (because obscurely spelt, archaic, or unidentified), plus a reference list of all variant spelling forms for anyone wanting to use the free-text search facility to find a particular place. Well-known and identifiable names that are consistently spelt in the same way as the stardard modern English form (such as, 'America', 'Bath', 'France', 'London') are not included.

### Register of Boyle's works

References to Boyle's own writings within the workdiaries are identified in the Register of Boyle's works. This gives a brief identification of the work in question and its position in Boyle's works or elsewhere, or records nescience where the work has

proved impossible to trace. Throughout, *The Works of Robert Boyle*, ed. by Michael Hunter and Edward B. Davis, 14 vols (London, 1999-2000), is abbreviated as *Works*. Published works are referred to by the short titles given in *Works*, i, xvi-xx. Other writings, including sections of books, are listed under the title by which Boyle refers to them. Workdiary references have the workdiary number then the entry number, for example: 21-253 (Workdiay 21, Entry 253).

### **Technical Policy**

#### Creation of the XML

The Workdiaries of Robert Boyle were encoded in TEI-XML by Dr Charles Littleton between 1997 and 2001 for a project funded by the Welcome Trust. The original output of this project was an online edition of the workdiaries published on the Birkbeck web site which incorporated HTML versions of the workdiaries transformed from the XML using XSLT. The AHRC Centre for Editing Lives and Letters 2004 edition was created from a revised and re-transformed version of the TEI-XML produced by Dr Littleton.

### XML document structure

Each workdiary has been encoded as a separate XML file with the root element <TEI.2>. Metadata and general workdiary information is contained within the <teiHeader> for each workdiary XML file. The workdiary transcriptions are enclosed within the parent element <text>. Multiple occurrences of <div> are used to mark up structural divisions within the manuscript and individual workdiary entries, the basic units of each workdiary. Each workdiary entry comprises at least two basic parts: an editorial note, which precedes the text of the transcription proper, and the text of the entry itself. A summary breakdown of all elements and attributes is provided below.

#### Structure of the <teiHeader>

The TEI header provides information about the source manuscript, a record of revisions, responsibilities and contributions to the transcription, publication details and the hands and languages present in the text. <teiHeader> is the level 1 parent element which encloses three level 2 parent elements <fileDesc>, <profileDesc>, and <revisionDesc>. The use of these level 2 parent elements, their children, and attributes are as follows.

Elements and attributes enclosed within <fileDesc> which is a bibliographic description of the text:

#### <titleStmt>

Child elements: <title> (title of workdiary), <author> (Robert Boyle), <funder> (funding body), <respStmt> (used for each individual contributors to the project and their responsibilities; 'id' attribute). Child elements of <respStmt>: <name> (full name of individual), <rsp> (list of responsibilities and contributions of the individual to the project).

#### <publicationStmt>

Child element: <publisher> which identifies the publisher of the electronic edition.

#### <noteStmt>

Child elements: <rs> (referencing string, used to link to the biographical register), <hi> (used to describe formatting), and <note> with the attributes 'resp' (indicating responsibility) and 'type' (which has the possible values 'content' giving a brief description of the workdiary content, 'length' giving the total number of entries for the workdiary, 'format' relating to the physical format of the manuscript source, and 'note' giving general notes and a commentary on the workdiary and detailing problems with its transcription or the physical manuscript source or layout).

Child elements of <note> are <add> (for words inserted in the workdiary text during Boyle's lifetime), <bibl> (for bibliographic references; 'id' attribute links to references in the bibliography), <title> (with 'level' attribute which describes the physical format of the reference, possible values are 'a' for article, 's' for series', 'm' for monograph), <biblescope> (describes the scope of the reference with attribute 'type' which refers to the type of reference, possible values are 'volume', 'date', 'pages'). Child element of <biblescope>: <num> (with the attribute 'value' giving the pages numbers of a volume or the volume number of a bibliographic reference).

#### <sourceDescDesc>

Child element: <sourceDesc> (the manuscript's physical location, has the child element <bibl>, see above).

<creation>, workdiary date of composition.

<langUsage>, describes the language(s) used in the workdiary.

Child element: <language> (with the attributes 'id', with the possible values 'en' for Enlgish, 'fr' for French, 'it' for Italian, and 'gr' for Greek, and 'usage' giving the number of entries ascribed to that language).

<handList>, describes the list of 'hands' or amanuenses which contributed to the composition of the workdiary

Child element: <hand> (the permitted values of the 'id' attribute are shorthand names for the scribes, e.g. 'Boyle', 'Hand A', 'Slare', the 'scribe' attribute gives the full name of the scribe, 'resp' gives the editor responsible for identifying the hand, 'character' lists the entires ascribed to that particular hand).

Elements and attributes enclosed within <revisionDesc> which is used to markup revisions to the the workdiary and the individual responsible:

#### <change>.

Child element: <date> (given in the form 'YYYY-MM-DD') <respStmt>. Child elements of <respStmt>: <name> (name of the individual responsible for the revision to the XML), <resp> (role and responsibilities of the individual behind the revisions), <item> (a description of hte revision carried out to the transcription text).

### Structure of the XML transcription text

Workdiary entries are enclosed within <text><body></body></text> The basic unit of each workdiary is the entry which is encoded using <div> with the value 'entry' as the 'type' attribute, i.e. <div type="entry">.

The attributes of the <div> element assign a unique number to each workdiary entry: <div type="entry" n="1" id="WD1-1"> where the value of the 'n' attribute is the entry number within the workdiary and the 'id' value is a unique value for that entry relating to that workdiary, i.e. 'WD1-1' refers to entry no.1 of Workdiary 1. Archival reference numbers are attributed within the first <pb> (page break) element at the start of each workdiary. Each <div> is followed by editorial notes, marked up as <note resp="editor">.

Marginal comments in the workdiary manuscripts are encoded using <note>. They are divided into items that were written at the same time as the entry they accompany (e.g. a date, or the source of a quotation) and ones which are retrospective, numbers, summaries of the content of the entry, etc. There are two types of marginalia:

### 'integral'

Integral marginalia is indicated by <note resp="author" type="integral"> . For integral marginal comments the possible 'type' values are: 'integral', 'integral/date', 'integral/number', 'integral/reference'.

### 'retrospective'

Retrospective marginalia is indicated by <note resp="author">. For retrospective marginal comments the possible 'type' values are: 'n' (a number that appears in the margin), 'note' (for any miscellaneous or stray marginal memoranda that appear to be in the hand and writing medium of the original scribe), 'reference' (where the bibliographic details of a work referenced are provided), 'date' (where <date resp="author"> and is an authorial date for the workdiary entry), 'endorsement', and 'mark' (for any symbols, ticks, crosses, circles that appear in the marginal text)

The text of the workdiary entry itself is contained within a paragraph element, . Four types of textual emendment are represented in the textual encoding:

#### Insertions and deletions

All insertions to the text are marked up with <add>. Deleted and altered words and passages are marked up with <del>. If an insertion is in the margin or inline the 'place' attribute is assigned with the value of either 'margin' or 'line'.

### Replacements

Where an insertion replaces a deleted text this is marked up as a replacement with <rep> as the parent element and the child elemnets <add> for the replacing word and <del> for the replaced word.

### Alterations

Where a letter or letters of a word have been changed then the entire word, in its final form, is marked up as a correction with <corr>. The description of the alteration is provided in the 'sic' attribute.

### The Workdiaries of Robert Boyle - documentation

Other features of the texts that have been encoded are as follows (a comprehensive account, listing all attributes and values and with a details concerning usage and exceptional cases, is included in the internal project documentation):

### <abbr> and <expan>

Abbreviations and the expanded form of an abbreviation.

#### <damage>, <gap>, <space>, <unclear>, and <supplied>

To encode damage in the manuscript, a gap due to loss or illegibility, a partially illegible section of text, or a section of white space. The <supplied> element encodes words and/or letters supplied by the editor.

#### <figure> and <figDesc>

To mark the point at which a graphic or diagram occurs in the manuscrpt.

### <foreign>

Identifies a word in a different language from the surrounding text.

#### <handShift>

Indicates a change of scribe in the text.

#### <head>

Heading of a workdiary or entry.

#### <hi>>

To encode text which is typographically distinct from the body of the text or inline text.

#### <lb>

To mark up a line break in a prose section of heading.

### <lg> and its child <l>

To mark up groups of lines and individual lines of verse.

#### st> and its child <item>

To encode lists.

### <pb>

Denotes a page break.

#### , <row>, <cell>

To encode material ordered in the form of a table.

### <rs>

To mark up items to be linked to external indexes, such as the bibliography and register of place names.