

Background

Although still relatively little-known and under-utilised, the collections of prints and drawings at the British Library are the nation's largest, with particular strengths in 17th- to 19th-century British and European art. The vast majority of these artworks are contained within items in our 'Western' book, map, and manuscript collections. They are currently not well-described in our catalogues, and several mistaken assumptions still prevail:

1. That most of the nation's prints and drawings are, and have long been, held by the British Museum;
2. That the British Library's collections differ from those of the British Museum in being 'documentary' in focus and accordingly lacking in historical and aesthetic interest;
3. That the sum total of the British Library's art collections are the (in fact relatively small) sections which are visible and secure, namely our illuminated manuscripts, topographical views,¹ and 'Visual Arts', mainly the former India Office art collections.

Historic cataloguing practice has tended to prioritise text over image, and inventory over description. Thus, the British Library's 'legacy' metadata contains descriptions such as

[Forty lithographs without letterpress, illustrating Bible history.]
Berlin, [1874?]
(<http://explore.bl.uk/BLVU1:LSCOP-ALL:BLL01002058531>)

Etchings of Gothic Ornament. [Without letterpress.]
Edward Buckton LAMB
[London], [1830]
(<http://explore.bl.uk/BLVU1:LSCOP-ALL:BLL01002058531>)

Lack of descriptive detail means that these catalogue entries are unlikely ever to be presented to users of our online catalogue,² and that beautiful and intriguing illustrations – such as those shown in figures 1 and 2 – are almost certain never to see the light of day.

As curators and cataloguers, we are reliant on phrases such as "with engravings" or "without letterpress"; the latter can provide a clue that a resource might comprise predominantly visual material. Equally useful are clues within shelfmarks: at the British Library, our founder Hans Sloane identified his prints with the prefix 'Pr', and the prefix "74/C." or "85/C." indicates large 'case books', a format of publication in which prints and drawings abound.

¹ "King's Topographical Collection : cataloguing and digitisation," 13 October 2020. [Online]. Available: <https://www.bl.uk/projects/kings-topographical-collection-cataloguing-and-digitisation>.

² British Library, "Explore the British Library," [Online]. Available: <http://explore.bl.uk/>

It is worth noting that there is a valid reason for a library to describe a resource as a single, illustrated volume, as opposed to a collection of prints – the volume can *only* be consulted as a volume; we're not going to unbind it (or worse still, cut the pictures out) to allow different users to view different illustrations at the same time. In simple terms: one thing merits one catalogue record.

But if this extreme brevity of cataloguing hides resources not only from the public, but from our own curators, and, moreover, if mass digitisation removes the barrier to concurrent use, then surely it is time to revisit our cataloguing and describe prints individually, and in detail?



Figure 1. Virtue preceded by a fool and followed by Glory. From 'Achillis Bocchii Bonon'. Found in the British Library at 636.g.8



Figure 2. Six mythical sea creatures. From 'Libellus varia genera piscium complectens'. Found in the British Library at. C.175.m.32.(20.)

Future goals

Felicity Myrone (Lead Curator, Western Prints and Drawings) has recently received a Getty Paper Project Publications grant to write the first handbook to the British Library's prints and drawings. The ambitious aim is for this handbook to be a ground-breaking point of entry to an under-explored collection, the first guide to the very extensive and historically significant collections of prints and drawings – but how can we write a handbook if even the curators don't know what we have?

In order to explore at least a section of our collections at scale, and at speed, we have developed a new spreadsheet-based method for cataloguing prints bound into volumes, working in collaboration with the British Museum to derive and covert their metadata. This relies heavily on two facts: firstly, that the British Museum *have* completed cataloguing of their prints and drawings;³ secondly, that they describe prints as individual art objects, rather than components of a series or bound volume.

³ British Museum. Department of Prints and Drawings, "Two million prints : online for all," 2022. [Online]. Available: <https://www.britishmuseum.org/exhibitions/two-million-prints-online-all>.

Our two institutions' shared history⁴ – and our Western European bias – means that we can expect to find significant overlap between our two collections. Works were often acquired by both the Print Room (which remains part of the British Museum) and the Department of Printed Books (later to become the British Library) but disbound in the former and held intact in the latter. The challenge, to mis-quote Donald Rumsfeld, is to find the unknown knowns – the things that we don't know that we have, but that the British Museum knows about. One starting point for exploring collection commonality has been to search by series title. As an example, the word 'gravures' in the title of *Recueil de gravures au trait, a l'eu forte, et ombrees* suggests that it may be of interest for our project. The legacy metadata for this resource within the British Library catalogue leaves much to be desired:

```
=LDR nam a2200169uu 4500
=001 012807088
=003 Uk
=005 20041123123949.0
=008 040420s1809####fr##### ||#####000# ||fre##
=040 ## $aUk$cUk
=100 1# $aLebrun,$cM.
=245 10 $aRecueil de gravures au trait, a l'eu forte, et ombrees /$cM. Lebrun.
=260 ## $aParis :$bDidot Jeune,$c1809.
=300 ## $a2 v.
=336 ## $atext$2rdacontent
=337 ## $aunmediated$2rdamedia
=338 ## $avolume$2rdacarrier
=852 41 $aBritish Library$bDSC$jW3/7089
=852 41 $aBritish Library$bDSC$jW3/7090
```

MARC21 source data for record accessed via <http://explore.bl.uk/BLVU1:LSCOP-ALL:BL01012807088>, 2023-09-21

Searching the British Museum catalogue⁵ for the title *Recueil de gravures au trait* yields a family of 40 prints. Immediately we have a checklist for prints that we might find within our two volumes. We can then compare the prints that appear within our copy of the series with those listed in the British Museum metadata, rather than having to catalogue from scratch. In essence, this is copy-cataloguing as has long been carried out; the difference being that we are sourcing metadata from a museum, rather than another library.

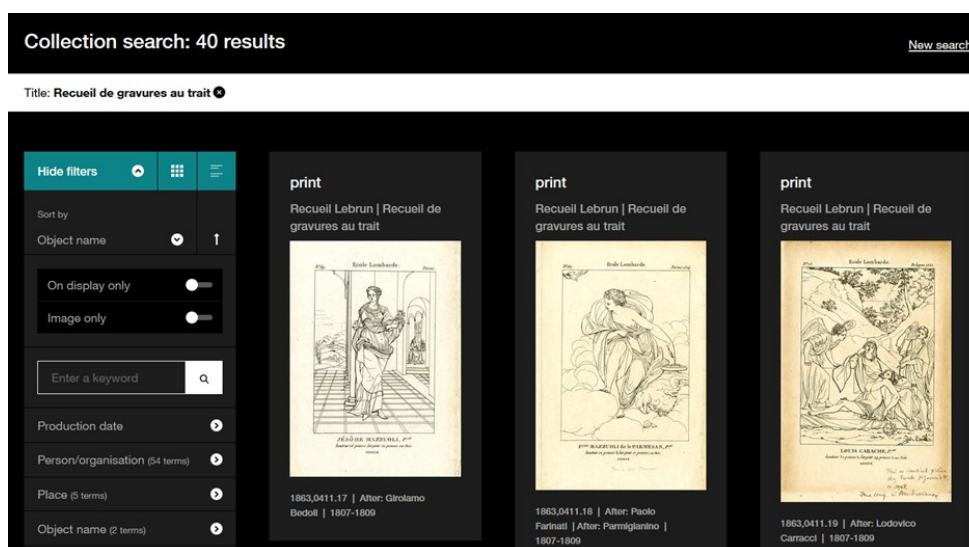


Figure 3. Screenshot from British Museum catalogue, accessed 2023-09-21

⁴ F. Myrone, "Prints and drawings at the British Museum and British Library," 2017. [Online]. Available: <https://www.bl.uk/picturing-places/articles/prints-and-drawings-at-the-british-museum-and-british-library>.

⁵ British Museum, "Explore the collection," [Online]. Available: <https://www.britishmuseum.org/collection>.

Whenever we are able to identify copies of the same works, we upgrade the existing record(s) for the bound volume(s) held by the British Library *and* create separate records for each of the prints contained within these bound volumes. Records for individual prints are then loaded to the British Library catalogue as analytic records. Our prints are made discoverable by printmakers, artists, publishers, former owners, titles, descriptions, mediums, and subject headings for the first time.

We describe the more technical aspects of our methodology in the following section.

Methodology

Metadata for British Museum collection items can be downloaded from their catalogue in CSV (comma-separated value) format, subject to their terms of use.⁶ There is a limit of 10,000 on the number of records that can be downloaded at once, which is one reason why we did not attempt to download and interrogate the entire British Museum collection of prints and drawings at once.

We wanted to achieve two things with the British Museum metadata:

1. To upgrade our existing volume-level records;
2. To create new print-level records.

Since CSV is a text-based format, it could easily be imported into Microsoft Excel. Getting British Library metadata into the same spreadsheet was achieved by far less elegant means – we opted to copy and paste records from the ‘MARC view’ of our online catalogue; see cell C2 of the screenshot below for an example. In part, this was a pragmatic choice as it allowed us to get started on the project without the need to train a cataloguer in the use of library software.

A BL record ID	B Filename for downloaded BM records	C Paste MARC record here <input type="button" value="Process MARC record"/>
1 BLL01000858454	collections-23-07-04-07_02_58.csv	FMT BK LDR nam a22001933 4500 001 000858454 008 990309 1804 enk eng 040 a Uk c Uk 24010 a Pictorial Representations. II. Representations originally published in Book Form or as Sets of Engravings. Holbein. Totentanz 24514 a The Dance of Death, etc. 264 1 a London, c 1804. 300 c (4 ⁹) 336 a text 2 rdacontent 337 a unmediated 2 rdamedia 338 a volume 2 rdacarrier 340 m 4to 2 rdabf 500 a In a contemporary English gold-tooled painted calf binding. 720 a DANCE OF DEATH e main entry 7870 t The Dance of Death; painted by H. Holbein, and engraved by W. Hollar. [With introductory essays by Francis Douce.] w (Uk)MP1.0000905523 d London: John Harding, 1804. pp. 70: plates; port. 12 ⁹ . LKR a PAR b 000858453 r 787 m The Dance of Death, etc. n The Dance of Death; painted by H. Holbein, and engraved by W. Hollar. [With introductory essays by Francis Douce.] 85241 a British Library b HMNTS j C.152.f.12. 866 0 z [Another issue.] SYS 000858454

Figure 4. Spreadsheet showing input of British Library MARC record

⁶ British Museum, "Copyright and permissions," [Online]. Available: <https://www.britishmuseum.org/terms-use/copyright-and-permissions>.

Use of Excel dictated that further data processing was carried out using VBA (Visual Basic for Applications), the scripting language which comes built in to the Microsoft Office suite. To achieve our two stated aims, we wrote two separate scripts:

Volume-level records

The first script breaks up the British Library MARC record so that each field appears in a separate column. This allows the cataloguer to make changes to individual metadata elements.

For those interested, we include a simple version of this script in appendix 1.

Print-level records

The second script creates records for prints. For a given file of British Museum records, it looks for occurrences of the filename in column B in the previous screenshot, and creates a set of print records for each occurrence.

In essence, this is:

new print-level records = British Museum file x number of volumes

If we have multiple copies (possibly different manifestations) of the same series of prints, we can create multiple sets of print-level records at once. In the case of series such as Holbein's *Dance of death* – 19 versions found so far! – this can be a real time saving.

For the most part, the work of this second script is to pull metadata from a specific column of the British Museum metadata, and move it to the column corresponding to the appropriate MARC 21 field. Thus in Figure 5, metadata from the 'Title' column is transferred to the 'Print title [245]' column in Figure 6; similarly, metadata from the 'Producer name' column is transferred to the 'Printmaker' column.

Some metadata is also transferred from the volume-level record. For example, ownership and custodial history information (MARC field 561) for the volume is likely to apply to the prints as well. If (as is commonly the case) publication and printing information are not given on the print, these are inferred from the volume.

Object type	Museum number	Title	Producer name
print; book-illustration	No: 1871,0812.4556	Zelome Sultane (Object)	Print made by: Melchior Lorck
print; book-illustration	No: 1871,0812.4555	Verhenas Sultane (Object)	Print made by: Melchior Lorck
print	No: 1983,0127.13	Surgi fortun (Object)	Print made by: Philips Galle; After: Ni
print; book-illustration	No: 1871,0812.4557	Ruziae Soldane (Object)	Print made by: Melchior Lorck
print; book-illustration	No: 1871,0812.4637	Raheme Soltane (Object)	Print made by: Melchior Lorck
print; book-illustration	No: 1929,0416.58	Raheme Soltane (Object)	Print made by: Melchior Lorck
print; book; title-page	No: 1904,0206.107.1-121	Deß Weitberühmbten... Herrn Melchior Lor	Print made by: Melchior Lorck; Publis
print	No: 1845,0809.584	Albrecht Dürer (Object)	Print made by: Johann Gottlieb Preste
print	No: 1895,0122.782	Albrecht Dürer (Object)	Print made by: Melchior Lorck; After:
print	No: E,2.383	Albrecht Dürer (Object)	Print made by: Melchior Lorck; After:
print; book-illustration	No: 1871,0812.4558	Achada Soltane (Object)	Print made by: Melchior Lorck
print; broadside	No: E,7.253	[Sibilla Tiburtina auch Albina genandt ...]	Print made by: Melchior Lorck; Publis

Figure 5. Input British Museum data

Shelfmark	Date for 008 [008]	Printmaker [100]	NACO identifier for printmaker [100]	Print title [245]
146.i.10.(22.)	s1570####	Lorichs, Melchior, 1527-approximately 1590	n91091570	[Sibilla Tiburtina auch Albina genandt ...] Eer und lob ein
146.i.10.(22.)	s1570####	Lorichs, Melchior, 1527-approximately 1590	n91091570	Achada Soltane
146.i.10.(22.)	s1570####	Prestel, Johann Gottlieb, 1739-1808	nb2009007182	Albrecht Dürer
146.i.10.(22.)	s1570####	Lorichs, Melchior, 1527-approximately 1590	n91091570	Albrecht Dürer
146.i.10.(22.)	s1570####	Lorichs, Melchior, 1527-approximately 1590	n91091570	Albrecht Dürer
146.i.10.(22.)	s1570####	Lorichs, Melchior, 1527-approximately 1590	n91091570	Deß Weitberühmbten... Herrn Melchior Lorichs... Wolger
146.i.10.(22.)	s1570####	Lorichs, Melchior, 1527-approximately 1590	n91091570	Raheme Soltane
146.i.10.(22.)	s1570####	Lorichs, Melchior, 1527-approximately 1590	n91091570	Raheme Soltane
146.i.10.(22.)	s1570####	Lorichs, Melchior, 1527-approximately 1590	n91091570	Ruziae Soldane
146.i.10.(22.)	s1570####	Galle, Philippe, 1537-1612	n86862363	Surgi fortun
146.i.10.(22.)	s1570####	Lorichs, Melchior, 1527-approximately 1590	n91091570	Verhenas Sultane
146.i.10.(22.)	s1570####	Lorichs, Melchior, 1527-approximately 1590	n91091570	Zelome Sultane

Figure 6. Processed British Museum data

In addition to basic data cleaning, our script attempted to reconcile terms used in the British Museum records against authority files preferred by the British Library. The following types of term were aligned:

- British Museum relationship terms (After/Ascribed to/Book bound by/...) were aligned with MARC 21 relators;⁷
- Object types (book of prints/book-illustration/engraving/photography/...) were aligned with FAST form/genre headings;
- Subject terms were aligned with FAST subject headings;
- Names were aligned with the LC/NACO authority file⁸ and ISNI.⁹

In practice, this meant keeping several lookup tables containing British Museum terms and our preferred equivalents. These could be accessed using a VLOOKUP formula. For those interested, an implementation of a VLOOKUP formula within VBA is included within appendix 2.

A certain amount of manual effort was inevitably required to build the lookup tables. However, we were able to exploit the structure of British Museum URIs to automate as far as possible. For example, we found that British Museum name authority records had URIs of the form <https://www.britishmuseum.org/collection/term/BIOG> followed by an integer – for example <https://www.britishmuseum.org/collection/term/BIOG56009> for Sir Hans Sloane. We could therefore systematically query these records using the Python ‘requests’ module, extract relevant information such as name and life dates, and programmatically search the FAST and ISNI APIs. If found within the ISNI database, the ISNI record would often contain the NACO identifier, which would then allow us to retrieve the authorised form of the name from the id.loc.gov website.

⁷ Library of Congress, "MARC code list for relators," [Online]. Available: <https://www.loc.gov/marc/relators/relaterm.html>.

⁸ Library of Congress / Program for Cooperative Cataloging, "NACO : Name Authority Cooperative Program," [Online]. Available: <https://www.loc.gov/aba/pcc/naco/>.

⁹ ISNI International Agency, [Online]. Available: <https://isni.org/>.

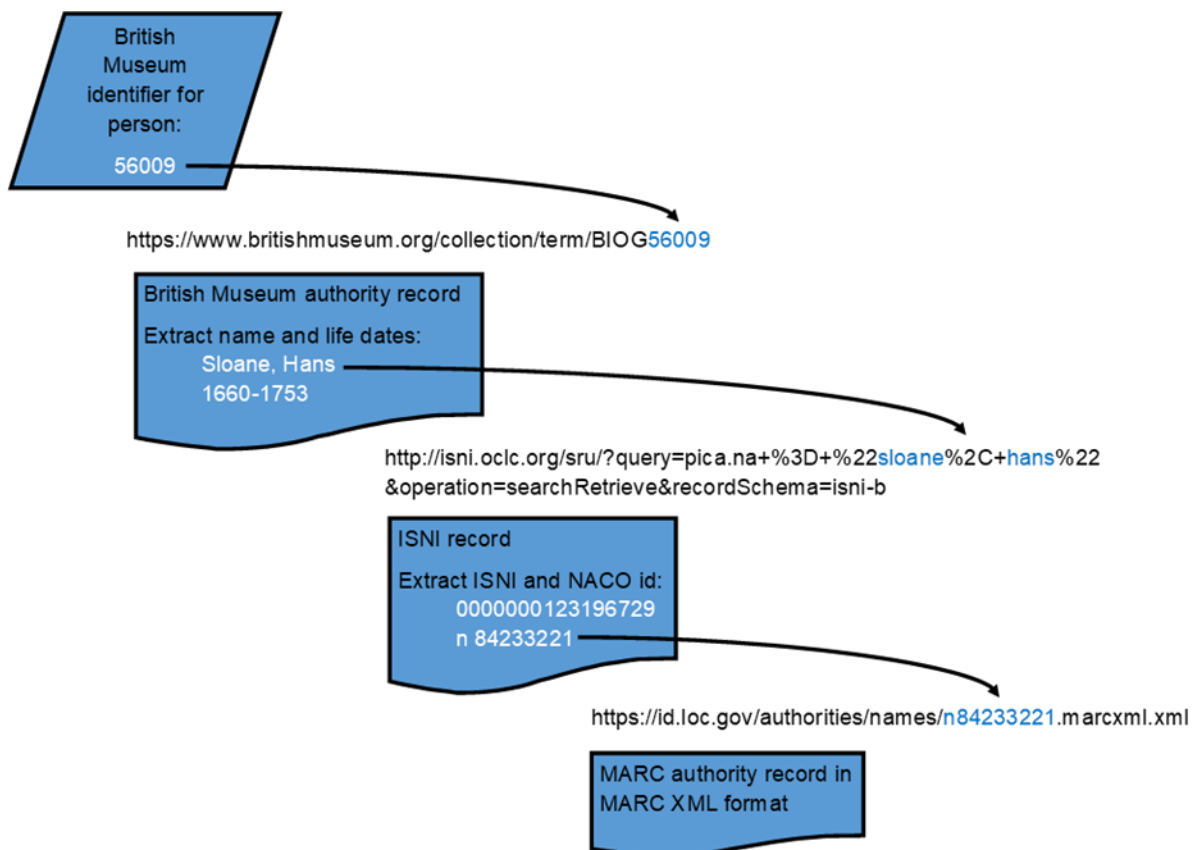


Figure 7. Flowchart for finding ISNI and NACO identifiers for names present in the British Museum catalogue. Note that the more advanced ISNI search API, which permits inclusion of life dates in the search, is only available to ISNI members. See <https://isni.org/page/technical-documentation/> for technical documentation on the ISNI API.

Outcomes

To date we have been able to create records for over 350 volumes and 22,000 prints using this method. Aside from the obvious benefits of being able to open up more of our collection to new audiences, by comparing the collections of the British Museum and British Library in this way we have been able to fill in some significant gaps in our knowledge of print collection history. For example, the fact that the British Library prints are held within bound volumes has enabled us to confirm that specific prints belong to particular series, and to better identify themes depicted across these series.

One example would be the British Museum print K,68.42, depicting a female bust, divided down the centre into two sides representing day and night. Curators' comments state that, "[t]his enigmatic print was registered as part of a series of illustrations to the 1692 edition of Diogenes Laertius. This may have been a mistake."¹⁰ We have been able to confirm that this was *not* a mistake, and that the print does indeed belong to Diogenes Laërtius' work *De vitis, dogmatibus et apophthegmatibus clarorum philosophorum*, notwithstanding that it is executed in a markedly different style from other prints within that volume.

¹⁰ British Museum, "Catalogue entry K,68.42," [Online]. Available: https://www.britishmuseum.org/collection/object/P_K-68-42. [Accessed 2023 09 26].

Potential developments

In addition to continuing with this project, we hope to extend the methodology to other work within the British Library – and perhaps to other institutions – with anticipated benefits to the other institutions involved, as well as the wider ‘print community’. A shared effort to tackle our print collections could enable a survey of which prints survive in libraries, and why, and could constitute the beginnings of a union catalogue of prints. This would be ambitious, but the benefits would be shared labour and knowledge, with the goal of revealing the nation’s (or world’s!) currently-hidden art collections. We’d be delighted to hear from anyone interested in pursuing this further.

Appendix 1 : VBA code to split up a MARC record into columns

This script will take a MARC record where each field appears on a separate line, and where subfields are delimited with the pipe character '|', and will split out 001, 245 \$a, 245 \$b and 246 \$c into separate columns.

```
Function GetSubfield(sF As String, sC As String)
    'sF is the input field
    'sC is the subfield code that we are looking for
    GetSubfield = ""
    'The subfield delimiter is |
    If InStr(1, sF, "|" & sC) > 0 Then
        'Get the first subfield with the code sC
        sF = Right(sF, Len(sF) - InStr(1, sF, "|" & sC) - 1)
        'Remove any subsequent subfields
        If InStr(1, sF, "|") > 0 Then
            sF = Trim(Left(sF, InStr(1, sF, "|") - 1))
        End If
        'Trim punctuation from the end
        Do While InStr(1, ",:.; [{}/\", Right(sF, 1), vbTextCompare) > 0
            sF = Trim(Left(sF, Len(sF) - 1))
        Loop
        'Trim punctuation from the start
        Do While InStr(1, ",:.; ]})/\", Left(sF, 1), vbTextCompare) > 0
            sF = Trim(Right(sF, Len(sF) - 1))
        Loop
        'Trim white space
        GetSubfield = Trim(sF)
    End If
End Function

Sub Process_MARC()

    Dim sMARC As String
    sMARC = ActiveCell.Value

    Dim aFields() As String
    Dim vField As Variant
    aFields = Split(sMARC, vbLf)

    For Each vField In aFields
        If InStr(1, vField, "001") = 1 Then
            'Record ID
            ActiveCell.Offset(0, 1).Value = "" & Trim(Mid(vField, 5, 9))
        End If
        If InStr(1, vField, "245") = 1 Then
            'Title
            ActiveCell.Offset(0, 2).Value = GetSubfield(Trim(vField), "a")
            'Subtitle
            ActiveCell.Offset(0, 3).Value = GetSubfield(Trim(vField), "b")
            'Statement of responsibility
            ActiveCell.Offset(0, 4).Value = GetSubfield(Trim(vField), "c")
        End If
    Next vField
End Sub
```

Appendix 2 : code snippet to use 'vlookup' within VBA

This code assumes that the active (selected) cell contains a list of uncontrolled subject terms, separated with the delimiter ; (semi-colon). A list of uncontrolled subject terms and their authorised equivalents are stored in columns A and B of a worksheet called "Subjects".

The 'for each' loop will iterate through each subject term, search for the uncontrolled term in column A, and, if found, return the corresponding value from column B.

At each iteration, Err.Clear clears any error information. After the lookup has been attempted, we test for error information (If Err.Number = 0 ...); if there is no error information, then the lookup has succeeded, and the variable sLookupValue will contain the authorised term.

```
'Subjects

For Each vVar In Split(ActiveCell.Value, ";")
    sTemp = Trim(vVar)
    sLookupValue = ""
    If sTemp <> "" Then
        Err.Clear
        sLookupValue = Application.VLookup(LCase(sTemp), _
            Sheets("Subjects").Range("A:B"), 2, False)
        If Err.Number = 0 Then
            'Subject term has been mapped
            'Do something with sLookupValue ...
        Else
            'Subject term is not recognised
        End If
    End If
End For
Next vVar
```