Graduate Research Skills: Workbook for Archaeological Science

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Access to online resources provided by the Bodleian Libraries:

- SOLO http://solo.bodleian.ox.ac.uk
  Library catalogue – provides access to all print and electronic resources.

- Libguides http://ox.libguides.com/
  Contains subject guides, reference management information, guide to workshops we offer and more.

- Single Sign On http://www.oucs.ox.ac.uk/webauth/oxfordusername.xml
  Used to verify access to SOLO and electronic resources (when off campus)

Handouts: https://libguides.bodleian.ox.ac.uk/archaeology
Reviewing the literature  Key questions and some answers...

1. Why is the literature review important?
   a. To provide a rationale for your research, to justify your research and its value, in light of what has gone before
   b. To understand your topic, how it has been researched before, and the issues involved (look at the journals in your area: the issues, the ‘discourse’ and genre, the methodologies used)
   c. To develop a conceptual framework for your own research
   d. To identify gaps in the literature
   e. To help focus your own research question
   f. To develop your own argument

2. Why be methodical?
   a. Gives a true, comprehensive and unbiased picture of previous research
   b. Provides a broad coverage of what IS there and identifies what ISN’T there - gaps
   c. Justifies what you want to include in your review – scope, coverage etc – and what you leave out
   d. Transparent and replicable – easy to find material again, can explain what you did to your supervisor/examiner
   e. Efficient use of time (not the same as time-saving!)
   f. Finds manageable and relevant results

3. How do you choose your search terms?
   a. Discussions with your supervisor
   b. Subject dictionaries/ thesauri
   c. Initial readings
   d. Subject databases – scope notes, thesauri
   e. Repeat/iterative searching – using subject headings, thesaurus terms
   f. Experimentation – keywords will evolve during review process

4. Where do you plan to search for the literature?
   a. Subject-specific databases
   b. Interdisciplinary databases
   c. Cross-searches of databases
   d. Library catalogues
   e. References at the end of articles
   f. Hand searches/online browsing of key titles
   g. Citation indexes
   h. Scholarly search engines, e.g. Google Scholar
   i. General search engines – limit to academic domains
   j. Current awareness databases (sign up for alerts)
Building a structured search
An example of one possible approach...

<table>
<thead>
<tr>
<th>Concept 1: Pottery</th>
<th>Concept 2: Neolithic</th>
<th>Concept 3: China</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ceramic</td>
<td>New stone age</td>
<td>Chinese</td>
</tr>
<tr>
<td>Pottery in Neolithic China</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Row 1

Row 2

Row 3

Row 4

(N.B. # means search number)

AND university and oxford

OR university or oxford

NOT university not oxford

Truncation: often represented by *
search on stem of a word and retrieve variant endings eg postmodern* gives postmodern, postmodernism and postmodernist

Wildcards: used within words, to retrieve alternative spellings
In some databases, for example:
$ retrieves either 0 or 1 characters, eg colo$r will find color & colour
? retrieves a single letter, eg wom?n will find woman or women
Building a structured search – task

Write your research question (or if you don’t have one, a brief sentence about a research interest) in the top box.

**Row 1.** Identify the key concepts in the research question and write one in each concept box (you may have more, or less, than 3 concepts).

**Row 2.** In the column under each concept brainstorm alternative terms which might be useful (e.g. synonyms, alternative spellings, broader/narrower/related terms.)

**Row 3:** Decide on your search terms and note down truncation and Boolean operators as appropriate.

**Row 4:** Complete the search strategy by combining your search sets.

<table>
<thead>
<tr>
<th>Research Question:</th>
</tr>
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<tbody>
<tr>
<td><strong>Row 1</strong></td>
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<tr>
<td><strong>Row 2</strong></td>
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<tr>
<td><strong>Row 3</strong></td>
</tr>
<tr>
<td><strong>Row 4</strong></td>
</tr>
</tbody>
</table>
Doing a structured search of the literature – General tips

Searching databases will not locate all research reports, as some may not be referenced in databases, and others may be missed in the searches. It is important therefore to use a combination of the following approaches:

- electronic database searching – free text and subject / thesaurus searching
- hand searching / electronic browsing of key journal titles (if being very thorough)
- searching of specialist websites – e.g. government bodies/organisations
- citation searching – tracing references forwards as well as backwards
- asking personal contacts, authors and experts in the field (can find contact information through databases such as SCOPUS and ProQuest).
- using general search engines, such as ‘Google’ and ‘Google scholar’

Whatever your approach to searching, it is advisable to keep a 'search log' to record the detail of how searching was undertaken. For example, which journals, websites and databases were searched and how and when, along with the list of search terms used and the combinations in which they were applied to the databases.

General expectations regarding structured searching of literature

- A list of databases, other sources to be searched, and possible journals to be hand searched should be defined initially.
- A list of search terms and the way they will be combined (OR, AND) should be established before formal searching begins and added to during the search process.
- The actual terms used and their combinations for each database search should be recorded, along with the date upon which the search was run (databases get updated) and the host that provided access to the database (e.g. ProQuest, Ovid, ISI Web Of Science). Databases usually allow you to save a copy of the actual search run.
- Searching the literature should be an iterative process. You may need to re-run your searches several times, using new words found during previous searches.

Introductory reading

Oxford Bibliographies: Oxford Bibliographies offers exclusive, authoritative research guides across a variety of subject areas. Combining the best features of an annotated bibliography and a high-level encyclopedia, this cutting-edge resource directs researchers to the best available scholarship across a wide variety of subjects.

Encyclopedia of Global Archaeology: This multi-volume work provides a comprehensive and systematic coverage of archaeology that is unprecedented, not only in terms of the use of multi-media, but also in terms of content. It encompasses the breadth of the subject along with key aspects that are tapped from other disciplines. It includes all time periods and regions of the world and all stages of human development. Mostly importantly, this encyclopedia includes the knowledge of leading scholars from around the world.

Graduate research skills
Search tools: Major Platforms for Archaeology databases include:

<table>
<thead>
<tr>
<th>Platform</th>
<th>Databases</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ProQuest</strong></td>
<td>Applied Social Sciences Index and Abstracts</td>
</tr>
<tr>
<td></td>
<td>Dissertations and theses (full-text)</td>
</tr>
<tr>
<td></td>
<td>International Bibliography of the Social Sciences</td>
</tr>
<tr>
<td><strong>Scopus</strong></td>
<td>Historical Abstracts</td>
</tr>
<tr>
<td><strong>OvidSP</strong></td>
<td>Scopus is a bibliographic database for science, medicine and some social sciences</td>
</tr>
<tr>
<td><strong>WEB OF SCIENCE</strong></td>
<td>GeoRef: from the American Geological Institute (AGI) provides access to the geoscience literature of the world.</td>
</tr>
<tr>
<td><strong>OCLC</strong></td>
<td>WorldCat</td>
</tr>
<tr>
<td></td>
<td>Conference proceedings / papers</td>
</tr>
</tbody>
</table>

Other specialist bibliographic databases:
- ABIA - index of South and Southeast Asian art and archaeology
- Année philologique – for Classical Archaeology
- eHRAF Archaeology
- BIAB – British and Irish Archaeology Bibliography (includes site reports)
- Bibliography of Asian Studies
- Dyabola – For Classical Archaeology
- Index bibliographique des figurines funéraires – Egyptology related
- International Medieval Bibliography
- Online Egyptological Bibliography

Primary Sources available through OxLIP+
- AMAR: Archive of Mesopotamian Archaeological Site Reports
- Archaeology Data Service
- Archives scientifiques du CFEETK (images from Centre Franco-Égyptien d’Étude des Temples de Karnak)
- Arthur Evans Archive (Knossos excavations)
- Beazley Archive (Archive relating to Ancient Greek Art)
- Champollion and Rosellini Egyptian Expeditions
- Current Archaeology in Turkey
- Digital Nineveh Archives
- Harvard Expedition to Samaria, 1908–1910
- Karnak Cachette Database (IFAO - SCA) (Images)
- World Heritage Sites: Africa

Graduate research skills
Web of Science

The Web of Science Core Collections brings together 5 major “citation indexes” including:

- Science Citation Index
- Social Science Citation Index
- Arts & Humanities Citation Indexes
- Conference Proceedings Indexes
- Book Citation Indexes
- Emerging Sources Citation Index

Between them they bring together thousands of journals articles. In addition, Web of Science tracks citations to articles. You can therefore find out which articles and authors have been most heavily cited, and for an individual article you see how often it’s been cited, which papers have cited it and which papers it cites.

Connecting and choosing citation indexes

1. Connect to SOLO (http://solo.bodleian.ox.ac.uk), search for Web of Science Core Collections and click View Online.

2. You will be prompted to choose between “University members only (login required for remote access)” and “University members only (login required for remote access).” If you are off campus it is important to choose “University members only (login required for remote access),” you will then be able to log in using your Oxford Single sign on (SSO). If you are on campus, it doesn’t matter which option you choose.

3. Click towards the bottom that you can search from Web of Science Citation Index, Arts & Humanities Citation Indexes. But unless your topic is very interdisciplinary it’s often a good idea to limit your search to just one or two databases. By default all the databases are ticked, so untick any that you don’t want to include.

4. Look at the search terms that you came up with in the “Building a search” exercise earlier and work out how to use the terms you identified in Web of Science. Here is an example on the topic of the human rights of child asylum seekers. See the tips below for more information

- What key concepts did you identify in the “Building a search exercise”?
  In Web of Science it is easiest to put each distinct concept on a separate line in the search form. e.g. In the example above the key concepts are asylum seekers, children and human rights so each term is entered on a separate line. Note – if there is only one line in the search form, click Add Another Field to add more rows.
• If you identified synonyms or alternatives words for your search terms enter these on the same line in the search form and add OR in between them
e.g. asylum seekers  OR refugees
• To find alternative word endings use *
e.g. child* finds child, children, childhood, child’s etc
• To search for an exact phrase use “quotation marks”. This is suitable for words which have a particular meaning when they are used together e.g. “asylum seekers”, “Human Rights”
• To replace a single letter or number use ?
e.g. wom?n finds women and woman
• Make sure all of the drop down menus are set to Topic and click Search

Working with your results

5. Take a look through your results and try out some of the following actions:
• Use the options on the left to refine your results list (e.g. by subject)
• Use the Sort by menu at the top of the screen to sort your results by Times cited (this will bring the articles which have been most heavily cited to the top of the list)
• Choose some results by ticking the check boxes to the left and email them to yourself (or use the Save to drop down menu to export them to RefWorks or Endnote).

6. Click on one of items in your list to see:
• An abstract
• Times cited - A list of later items which have cited the article
• Cited References (the article’s bibliography – with links to full text)
• Related records (articles with at least one citation in common)
7. When viewing the article abstract it's also worth looking at the keywords section. This may help you to identify more search terms to use next time.

8. To find the full text of an article click [Find it - Oxford] (Note - if you are looking at the abstract you will need to click on Full text options in order to see the button). You will see a pop up window (illustrated below) listing:
   - Full text available via provides links to database which have the full text of the article.
   - Check SOLO allows you to search for a printed copy of the article in Oxford Libraries.
Setting up a search alert in Proquest – task

http://search.proquest.com/

Once you have found some useful search results, you can set up an alert that will notify you every time new material is added to the database which matches your search criteria.

- To do this on ProQuest, you first need to have a My Research account, so click on this icon in the top right of the screen.

- If you already have an account, sign in.

- If you don’t already have a Proquest My Research Account, scroll down to create one by clicking on Create a My Research account.

- Fill in the short online form and click to create an account.

- Then click on Go to My Research.

- At the top right of the screen, return to your previous search, by clicking on the icon for recent searches:

- You will see a record of your recent search(es). Hover your mouse over Actions to the right of the search you would like to use for your alert.

- To set up an email alert, select the option “Create Alert”.

- Complete the four online steps to set up your alert. (Note: make sure you select Yes, to include details of the search you used to set up the alert. You may also want to change the default drop down option, to include older documents that are added to the database.)

  ![Step 3: Define your alert content](image)

- You will now receive email alerts at the frequency you have chosen, listing all new material added to the database.

- You can also choose to use feed readers, such as Feedly or InoReader to receive your alerts as RSS feeds rather than as emails.
Keeping up to date with journals- task

Information sources are increasingly varied and vast, and monitoring the latest developments is especially challenging for those engaged in interdisciplinary research. Developing a method for keeping up to date with new research is a key step in the research management process.

In this task, you will set up an email alert to get new research to come to you from selected academic journals. This task uses JournalTOCs, a freely-available journal current awareness service providing access to recent tables of contents from over 28,000 scholarly journals. Zetoc (http://zetoc.jisc.ac.uk/) is another commonly used email alert service.

Setting up JournalTOC Email Alerts

- Go to JournalTOCS (http://www.journaltocs.ac.uk)
- If you want to set up email alerts sign up for a JournalTOCS account (centre screen). Registration is free.
- Search for a journal title of your choice.
- Your search results will appear beneath the search box (not in the centre of the screen). Click on a journal title to see the latest table of contents.
- Tick the Follow check box next to the journal title
- Click on your JournalTOCS log in name (top right) and click Followed Journals
- Check that Email Alerts is On. You will now receive the table of contents for your chosen journal every time a new issue is published
- To determine how often you receive an email alert click on your log in name and choose Account Settings.
- If you have signed in to JournalTOCS be sure to Sign out at the end of your session and close your web browser using the x in the top right hand corner.

2. Other Types of Alerts

It is also possible to set up RSS feeds from many different sources including JournalTocs (by exporting your Followed Journals), SOLO, saved searches in databases, institutional websites, citation alerts for specific articles and so on. You can set up a feed whenever you see the RSS or logos.
Setting up RefWorks

Set up a Refworks account

a. Go to: https://refworks.proquest.com/ or search for Refworks Proquest.
b. Click on create and account and enter your University email address and then click 'check' to start the process of setting up your account. NB you MUST use your University email address.
c. Refworks should recognise the address as belonging to Oxford. Now pick a password to continue the signing up process, and click 'sign up'.
d. An activation email will be sent to your email account. You can then either click on the link or copy and paste the link into a browser to continue.
e. Once you click the activation link, you will be prompted to fill in some details for your account eg name, area of study, type of student.
f. You then have the option of watching a small slideshow with a very brief introduction to Refworks but you bypass this by clicking 'Skip tutorial'.
g. You should now have your account set up.