

QUICK GUIDE TO DATABASE SEARCHING

BASIC BOOLEAN LOGIC

Boolean Logic is a system of simple commands, which are used to link keywords and phrases in order to perform precise searches. Mastering these commands is an essential part of the research process. The basic principles are as follows:

- **AND**
Combines keywords so that each result contains all of the keywords entered. For example, **Medici and glass**, will find results containing both of these keywords although they do not necessarily have to appear next to each other
- **OR**
Using **OR** combines keywords so that each result contains at least one of the keywords. For example, **enamel or cloisonne**, will find results that contain either keyword, so it gives you broader search results. This type of search is effective for synonyms and variant spellings, i.e. **fiber or fibre**.
- **NOT**
Using **NOT** excludes keywords so that each result eliminates the keyword following **NOT** in the search string. For example, **python not monty**, will narrow your search, giving you results about snakes while eliminating those about Monty Python. Be very cautious about using the **NOT** operator as it can sometimes exclude relevant results. For instance, in this case you could miss a cutting edge article about python mating rituals by the author Gerald Monty.

Once you are comfortable with the above operators, it is possible to perform very structured searches by combining elements of Boolean Logic using parentheses to define your search sections, for example:

Computers **and** (teaching **or** education)

Vienna **and** (secession **or** sezession)

(France **or** French) **and** wallpaper

This technique is called "nesting". It is important to remember that when you use parentheses, they are always used in pairs:

Picasso **and** (Painting **not** (sculpture **or** ceramics))

Remember that if your search gets too complicated, your results may end up too limited. It is always a good idea to try a variety of combinations.

OTHER TOOLS FOR DATABASE SEARCHING

□ PHRASE SEARCHING

Phrase searching will look for results where the keywords appear exactly as they are entered, creating a very specific search. They are indicated by the use of quotation marks: "**Biedermeier Furniture**" or "**Josef Hoffmann**". It is particularly useful if you are searching for names or terms that you are sure about. If you search for "Biedermeier Furniture" you may miss a result entitled "German furniture: from Biedermeier to Bauhaus". Likewise "George Bush" will miss results for George W. Bush or George H. W. Bush.

□ TRUNCATION

Truncation terms vary among databases and search engines. Normally, they are indicated by the symbols *, !, or ?. Truncation allows you to enter the root of a word and search for variant endings. For example: **cubis*** will find results containing cubist, cubists, and cubism. **Administrat*** will find entries containing administration, administrators, administrative, etc.

□ VARIANT SPELLING

When you are unsure of the spelling of a word, you can use a symbol to stand in for the letter in question. For example: **organi?ation** will find both organization and organisation. The most common symbol for variant spelling is the question mark, but it is always a good idea to check the help page of the database you are using to make sure.