# To Find or Not to Find: An Evaluation of Naxos Music Library's Search and Browse Capabilities

## By Sophie Rondeau

#### Introduction

Naxos Music Library (NML) is a popular online music streaming service offered to patrons by many libraries, both public and academic. NML claims to be the largest online classical music library, and in addition to offering music streaming, it also provides background services including audio book transcriptions, libretti and synopses, a pronunciation guide, glossary, musical terms, work analyses, and work details. As an online music library, it is essential that NML's interface support usability and findability. Following the principles of Information Architecture outlined by Morville and Rosenfeld, this paper will provide a heuristic evaluation of NML's search and browse capabilities. It should be noted that this examination is limited exclusively to NML, and does not include other sites of Naxos Digital Services Ltd.

A heuristic evaluation is a review of a website, often conducted by a usability expert, for the purpose of identifying existing problems and areas for improvement. Although I am not prepared to call myself an expert, I do have an understanding of the principles of Information Architecture. As well, I am a user of NML, so am able to provide a review that examines the search and browse features from both vantage points. Needless to say, a heuristic evaluation that only examines search and browse is an incomplete review. A complete review would include a comprehensive examination of labelling and organization systems, as well as a more detailed examination of NML's navigation system than will be presented here. An even more rigorous heuristic review can go so far as to include several experts from different backgrounds—the information architect being one of those experts—to evaluate the many aspects of a site. Nonetheless, search and browse capabilities are essential functions for most websites, and deserve critical evaluation, especially in light of NML's status as a subscription-based service.

### Search

To test the search capability in NML, I conducted a search using the term "nocturne." The search certainly yielded substantial results; I received 2230 results. I also searched "nocturnes" and received the same number of results, which indicates that NML's search is designed with a stemming tool to retrieve variant terms (in this case, the singular is also retrieved when searching the plural). NML's search interface also has a spell checker; it does not automatically correct search terms, but provides a "did you mean" correction with a hyperlink to the correctly spelled term.

Sophie Rondeau currently works as a Media Librarian for the CBC Radio Archives in Winnipeg. She has an M.Mus. from the University of Manitoba and an MLIS from the University of Wisconsin-Milwaukee.

<sup>1.</sup> Peter Morville and Louis Rosenfeld, *Information Architecture for the World Wide Web* (Sebastopol, CA: O'Reilly, 2007).

The lack of controlled vocabularies is a weakness of NML's underlying metadata. A search for nocturnes will retrieve stemmed variants, but does not expand the semantic nature of a query by including synonyms or foreign language alternates. For example, the term *Nachtstücke*, which translates as "Night Pieces," is not included in a search for nocturnes. When dealing with Western European music, foreign language equivalents are common, and creating links between synonymous foreign language terms is important for an exhaustive search. NML could benefit from including a synonym ring: a metadata tool for connecting terms defined as equivalent (see fig. 1).

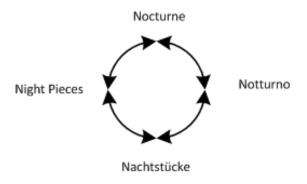


Figure 1: A synonym ring

The number of search results retrieved using the term nocturne(s) would certainly increase if equivalent terms were included. Although high recall can be desirable for those seeking exhaustive searches, it can also overwhelm those seeking greater precision. NML provides an Advanced Search option which can help focus a search, but that tool presupposes a certain degree of knowledge. It also requires users to think before they search, and research in website design clearly indicates that users don't want to have to think too hard. Users prefer an interactive system that provides ease and flexibility.

One way varying needs can be accommodated is through faceted classification. In practice, facets are optional links for refinement of queries. They provide linked access to the underlying metadata. They benefit users seeking greater precision, while those satisfied with high recall may simply ignore them or use them to examine the full range of results more categorically. I would favour facets over NML's Advanced Search option because of their ease of use and flexibility. They provide visually immediate options for refinement; users simply click on pre-established links. This is not to suggest that the Advanced Search option be entirely discarded since it may serve users with very specific needs.

Search engines use algorithms in many ways, and NML is no exception. Although no search engine will meet all user needs, the manner in which NML presents search results is irregular; there is no apparent organizational scheme to the results. The query is restated at the top of the results, but there is no sort order or ranking, never mind sort options. Users would have to sort through the results one at a time, and with 2230 results, it is unlikely most users will do this. The ambiguous

results display could be improved with faceted classification. Examples of facets suitable for NML could include:

- Artist
- Composer
- Instrument
- Label
- Period

One may argue that faceted classification is not appropriate for an online library with as much content as NML; facets can lose their effectiveness when there are too many refinement options. There is some validity to this argument; however, instead of offering limited opportunity for refinement, and leaving the user with a barrage of unorganized search results, the system could be enhanced by providing expandable containers. WorldCat illustrates how expandable containers can handle substantial content. The screenshot example provided (see fig. 2) illustrates options for refinement in a search for nocturnes in WorldCat. Something similar could be valuable for NML.

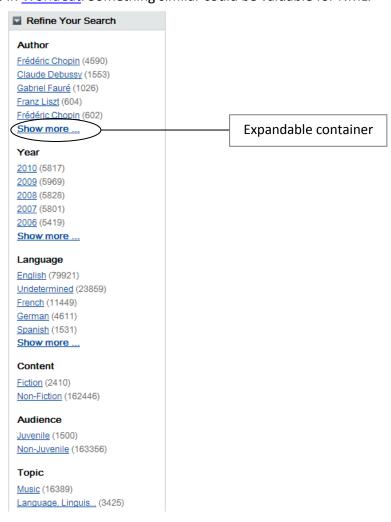


Figure 2: An example of expandable containers in WorldCat

#### **Browse**

A good database interface offers both search and browse capabilities, and NML does indeed accommodate browsing, although, as mentioned above, it does not integrate these two functions simultaneously. NML does integrate global and local navigation, and has minimal supplemental navigation in the form of guides and tutorials. NML's global navigation system is characteristically present on every page of the site at the top in a horizontal navigation bar. The entire NML can be browsed by Composer, Genre, or Label. As well, users may browse Artists, New Releases, and Recent Additions. The Genre category expands to provide local navigation through a drop-down menu. NML offers limited integration of global and local navigation, and perhaps for good reason. The content of many of the global categories is simply too large to expand through a drop-down menu.

The distinction between New Releases and Recent Additions is not entirely clear. When browsing by New Releases, the user may choose to refine by label, whereas the Recent Additions tab provides for further refinement by Featured Additions or All Recent Additions. The All Recent Additions option allows further refining by Date Range, and those dates help clarify NML's definition of "recent additions." Recent and Featured Additions are displayed for browsing on the homepage, which may prove desirable for returning users looking for new items.

NML uses an alphabetical organization scheme for Composers, Labels, and Artists. Browsing by Composer or Artist can be laborious because of the size of the collection. Although NML automatically filters alphabetically, there are many links within most filters that browsing becomes cumbersome. I would suggest that NML further refine their alphabetical filter so there are fewer results per page. For example: CA - CD; CE - CH.

NML offers further refinement once an artist or composer has been selected. Users may view by Album or Work, and again, the user may select alphabetical or numerical filters. As well, users may select categories from a controlled list. These options provide users with greater flexibility to explore the online library.

### Conclusion

Although there is a wealth of music content on NML, the scope of the site is quite focused: it is a classical online music streaming service, offering certain background services as well. NML has distinct boundaries with the content it provides to users; it is not attempting to be "all things to all people." Given its focus, it is within NML's reach to enhance its online service to attract more users and facilitate greater and more effective discovery. Search and browse are essential tools to the discovery process, and although NML is doing some things well, they could certainly go further in enhancing their service to the user. As a subscription-based service among many free music streaming services, NML must continue to improve its functionality to convince users of its worth.