Objectives
This study combines theoretical and human-centered perspectives to examine how major online booksellers organize their resources and the access points they provide for discovery.

Introduction
Organization systems in online bookstores do not hold to the same objectives as traditional information organization systems - to find, identify, select, obtain and navigate the system [5]. They not only facilitate finding of sought objects but also place an emphasis on serendipitous discovery and recommendations.

Access points – points of entry into an organized set of information objects [4].

• Facets – “clearly defined, mutually exclusive, and collectively exhaustive aspects, properties, or characteristics of a class or specific subject.” [6]
• Categories – named groupings based on assigned labels [2].
• Clusters – groupings based on similarity that do not necessarily correspond to a meaningful concept [2].

Methods
Data from nine online bookstores were collected over the first two weeks of November 2010. The study examined the characteristics of the main book portal, the advanced search page and a search results page on each site.

Analysis
Lambe’s heuristics for taxonomy validation [2] were used to carry out a critical examination of access points presented on each page, inductively drawing conclusions from the content:
• Intuitive – reflects user expectations and is easy to use
• Unambiguous – presents a clear choice for any piece of desired content
• Hospitable – accommodates new content
• Consistent and predictable – arrangements subcategories according to a single rule
• Relevant – reflects the user’s view of the organization and its activities
• Parsimonious – provides only the amount of organization needed with no redundancy
• Meaningful – allows predictions on content based on the structure
• Durable – takes a long view of content, requiring little change over time
• Balanced – provides a stable amount of content, number of categories and specificity across the system of organization

Most bookstore organization systems have genre groupings at the core. In this sample, these were found not inconsistent, variously including elements of format, language or geography. Access points tended to take the form of categories with some use of facets. Categories such as popular options, price and gifts for… were found to be particularly difficult to predict and were designed to alter over time.

Generally, larger retailers have more developed organization systems. Chapters in particular incorporates more structure while remaining usable. Other bookstores in the study are less in line with Lambe’s heuristics, focusing instead on intuition and relevance. Most are designed for exploration and discovery as well as retrieval, with multiple access points based on recommendations.

Table 1. Online bookstores selected for the study

<table>
<thead>
<tr>
<th>Bookstore</th>
<th>URL</th>
<th>Separate book section?</th>
<th>Result filtering?</th>
</tr>
</thead>
<tbody>
<tr>
<td>AbeBooks</td>
<td><a href="http://www.abebooks.com">www.abebooks.com</a></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Amazon</td>
<td><a href="http://www.amazon.com">www.amazon.com</a></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Barnes&amp;Noble</td>
<td><a href="http://www.barnesandnoble.com">www.barnesandnoble.com</a></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Borders</td>
<td><a href="http://www.borders.com">www.borders.com</a></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Chapters</td>
<td><a href="http://www.chapters.indigo.ca">www.chapters.indigo.ca</a></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Place du Livre</td>
<td><a href="http://www.placedelivre.com">www.placedelivre.com</a></td>
<td>✓</td>
<td>x</td>
</tr>
<tr>
<td>Powell’s Books</td>
<td><a href="http://www.powells.com">www.powells.com</a></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Renaud-Bray</td>
<td><a href="http://www.renaud-bray.com">www.renaud-bray.com</a></td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

Conclusion
The organizational characteristics of these online booksellers do not adhere to many of the principles and heuristics discussed in the literature [3][5]. Results noted some odd additions to otherwise traditional groupings and the privileging of recommendation categories over known-item retrieval facets. Online bookstores seem to put an emphasis on the principles of intuition, hospitality, relevance and meaningfulness. Groupings also appear to be used to illuminate bookseller specializations.

References