Faceted Classification for Museum Artefacts:
A Methodology to Support Web Site Development of Large Cultural Organizations

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Introduction

- Museums give access to their collection through their Web sites.
- The educational potential of these resources is immeasurable.
- These Web sites are often too complex and sophisticated.

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Introduction

- The needs of the users are often disregarded in the organization of the museum content.
- Faceted classification presents great potential in providing simple, flexible and scalable information access points.

Objective

- The research project aimed to provide a visual representation of the Artefacts Canada digital collection.
- *Artefacts Canada Humanities* database contains approximately 3.5 million records describing the different collections of Canadian museums.

Methodology

Four-step methodology

1. Best practice review
2. Domain analysis
3. Term clustering and selection of the top-level facets and sub-facets
4. Incremental user testing

Methodology

1. **Best Practice Review**

- Analysis of existing terminology standards in Canadian museum community and public Web interfaces.
- Objectives:
  - to assess how controlled vocabularies can be adapted in the development of the new taxonomy;
  - to examine web interfaces for the collection of large cultural organizations.

Methodology

2. Domain Analysis

- Mapping of selected vocabulary sources categories/fields with Artefacts Canada database fields.
- Objectives:
  - to limit the scope and the coverage of the future taxonomy;
  - to explore and detect potential facets;
  - to provide recommendations on first-level facet selection.

Methodology

3. Term clustering and selection of the top-level facets and sub-facets

- Selection of top-level facets and their sub-facets.
- Incremental taxonomy development implying the combination of a bottom-up approach to a bottom-down strategy.

Methodology

4. Incremental User Testing

- Based on usability testing measures emphasizing how well people use human-made objects for their intended purpose.
- Objective:
  - to insure the final product was clear, comprehensive, and consistent.

Methodology

4. Incremental User Testing

- Phase 1 - Card sorting technique
  - Classification of a set of “cards” representing the second level facets of the taxonomy.
  - Sample: 5 French speaking and 3 English speaking persons.

Methodology

4. Incremental User Testing

Phase 2 - Retrieval Simulation and Questionnaire

- Retrieval tasks using the taxonomy to measure the usability of the structure.
- Sample: 4 French speaking and 6 English speaking persons.

Results

1. Best Practice Review

- The majority of the reviewed resources covered many different aspects of the museum's collections.
- Two broad categories are used to describe the museum's collections:
  1. Descriptive elements
  2. Contextual elements

Results

1. **Best Practice Review**

- The majority of the examined resources provide a hierarchical structure with no standard number of hierarchical levels used.
- Six resources exist only in English while five of them are bilingual.

Results

2. **Domain Analysis**

- Conceptual and statistical analysis of the AC frequency reports:
  1. classifying fields;
  2. fields relating to the description and the composition of the object;
  3. fields relating to time;
  4. fields relating to the place of creation and use of the object;
  5. fields relating to the artistic, cultural and academic context of the object.

Results

2. **Domain Analysis**

3 outcomes:

1. Identification of a relation between several fields for later facet identification.
2. Limitation of the scope and coverage of the future taxonomy.
3. General recommendations on first-level facet selection.

Results

3. **Term clustering and selection of the top-level facets and sub-facets**

3 steps:

1. Broken up of the taxonomy domain.
2. Organization of the facets.
3. Normalization of the facets and their descriptors.

Results

4. Incremental User Testing

Phase 1 - Card Sorting

- Analysis of the card sorting results to compare the piles created and the naming assigned to each.
- Changes brought to the first draft of the taxonomy.

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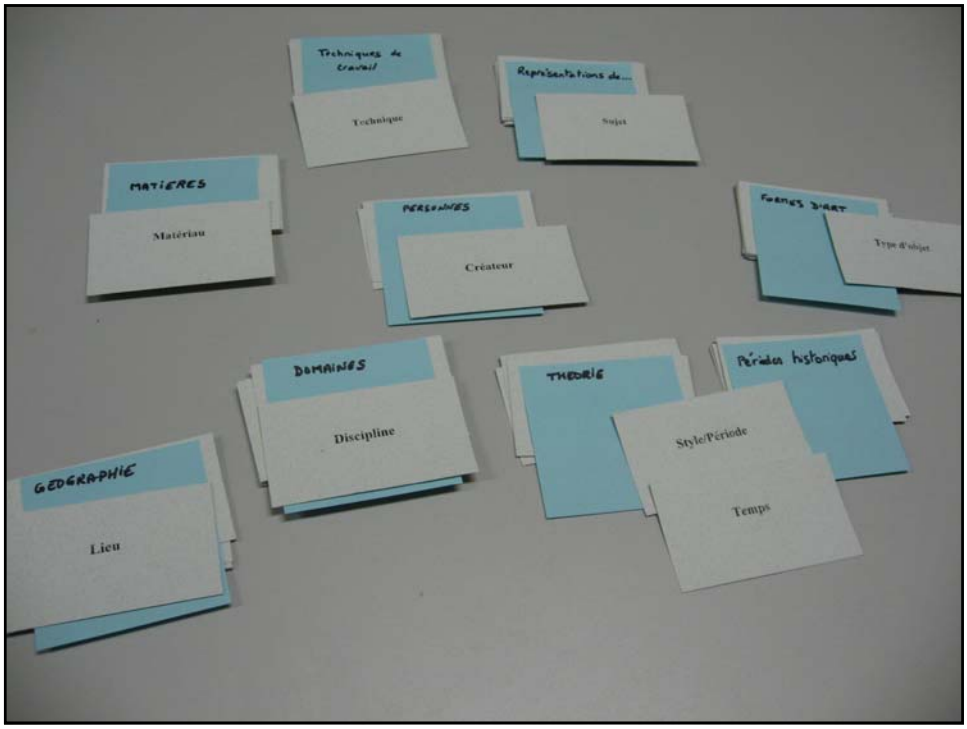

Results

4. Incremental User Testing

Phase 2 - Retrieval Simulation and Questionnaire

- Users are willing to search objects through a combination of categories.
- User testing emphasized the potential of facet classification and the possibilities to browse with multiple entry points.

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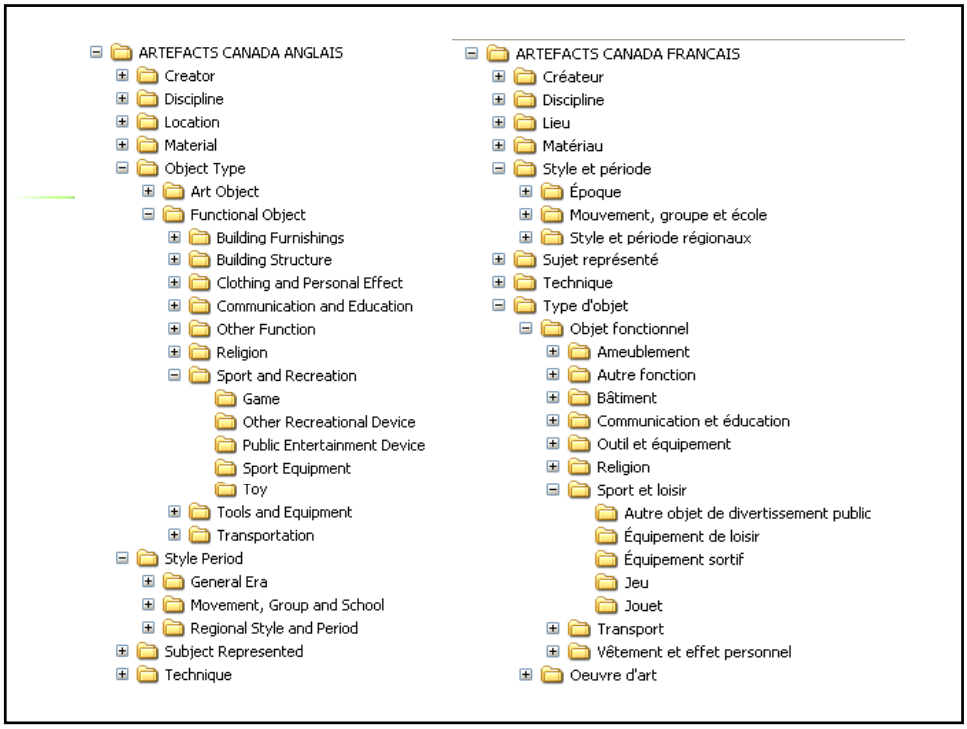

Results

4. Incremental User Testing

Retrieval Simulation and Questionnaire

- The approach in designing the new taxonomy answered the fundamental questions:
  - *who* is doing something
  - *what* is being done
  - *how* it is being done
  - *by what means*, *where* and *when* it is being done

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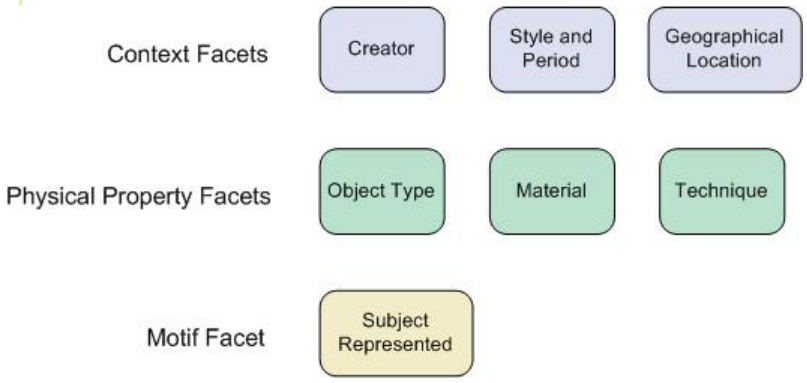
Results



Results

Facet	Definition
Creator	Refers to the entity that creates or produces the object or the work.
Geographical Location	Contains the name of the general regions, continents, countries and provinces where the object is created (for work of art) or used (for functional object).
Material	Refers to what the artefact is comprised of, made with. Most of the terms regrouped in this facet represent material based on their composition or origin.
Object Type	Refers to all entities which can be perceived by the senses, and most specifically by the view.
Style and Period	Provides the names of distinct historical periods, broad cultural region styles and periods, art and architecture movements and groups & schools that are represented in the artefact.
Subject Represented	Refers to the iconographic content to describe the subject or image of the object whether the optical counterpart exists in reality or in imagination.
Technique	Represents the processes, methods and means used to produce an object.

Discussion and Conclusion

- High level and flexible representation of the information.
- User-friendly bilingual taxonomy providing better access Canadian virtual museum collections.

Discussion and Conclusion

Recommendations

- The taxonomy should take into account the users' perspective.
- The number of choices presented to the user should be limited.
- The interface for searching and browsing should be as simple as possible.

Thank you!

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