Since the subjects of print materials and visual media vary, it is useful to have separate standardized vocabularies when cataloging different types of media. *The Art and Architecture Thesaurus* and *The Thesaurus of Graphic Materials* are two thesauri developed specifically for cataloging images; however, the development of the majority of thesauri and subject heading lists used widely throughout the United States took place in and for the United States, and therefore these resources tend to be very Western-centric. This creates difficulties when cataloging non-Western media, as many of the necessary terms may not be available or specific enough. This study compares the coverage of Islamic architecture terms in *The Art and Architecture Thesaurus* and *The Thesaurus of Graphic Materials*, two thesauri developed specifically for cataloging images.

Headings:

Subject headings

Thesauri

Cataloging of graphic materials

Architecture, Islamic
A COMPARISON OF THE ART AND ARCHITECTURE THESAURUS AND THE THESAURUS FOR GRAPHIC MATERIALS FOR THE SUBJECT CATALOGING OF ISLAMIC ARCHITECTURE IMAGES

by
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Approved by

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Jerry D. Saye
Introduction

Throughout the Western world, and particularly in the United States, there is a growing interest in Islam, and in Arabic culture in general. As society becomes more globally aware, it causes people unfamiliar with the Islamic religion and the cultures of Arabic countries to develop greater interests in these countries, cultures, and people. As people, both researchers and the general public, express increased interest in learning about other cultures, it is important for libraries to provide materials which people can use to educate themselves about the peoples of these cultures.

While expanding a library’s collection of materials relating to other cultures may not be particularly difficult, cataloging the subject of acquired materials may prove to be slightly more problematic. Further, classification schemes may not be specific enough to provide necessary differentiation among topics. It may be difficult to find subject headings which accurately reflect the true nature of the items in question, causing problems not only for catalogers, but also ultimately for persons retrieving the items. The dominant standardized vocabularies used in the United States tend to, not surprisingly, focus on Western cultural and societal norms since librarians in the United States developed these vocabularies in and for works acquired by libraries in the United States. Consequently, they may not include sufficient terms to adequately describe materials of other cultures. All these factors have the potential to limit the effectiveness by which people can locate the necessary resources.
Without a wide range of detailed subject headings from which to choose, catalogers face difficult decisions regarding how they should catalog an item. A cataloger must apply a subject heading even when none of the available terms in the controlled vocabulary seem to appropriately encapsulate the essence of the item. A Western term for an Arabic concept can create difficulty for people who attempt to find materials on a particular topic. If a necessary descriptor is not available in the particular vocabulary that is in use, a cataloger must consequently apply a less appropriate one instead. The term chosen may be too broad, or it may be slightly off the topic. Regardless, it is a term which does not adequately reflect the item’s attributes. Cases such as these make it difficult for library patrons to find what they seek. When searchers do find what they are looking for, they do so with frustration and an unnecessary expenditure of time trying to ascertain which terms will produce the desired results. Inexperienced searchers may give up completely before finding the results for which they had hoped. In order to create successful searching experiences, catalogers must apply appropriate terms; however, in order to apply these terms, they must first be available in the standardized vocabularies.

The lack of suitable terms for items of Islamic or Arabic origin is certainly a problem for print materials that one typically thinks of as library resources. However, libraries also have many other types of resources, including images. Catalogers also apply subject headings to images. This presents a problem for art objects, architecture, and items of material culture. People need to access a library’s image collection just as they would a print collection. Therefore, accurate subject headings are equally as vital for image collections as for other materials. Other institutions besides libraries, such as museums, also have collections of images and art objects. Thus the need for appropriate
subject terminology presents a challenge for those who catalog or search for these types of materials regardless of the nature of the institution.

Although many topics of visual materials are no different than those found in print materials, the difference in medium necessitates some variations. Many topics are more commonly found in print than they are in images. Conversely, many topics are more commonly represented by visual works than they are in print format. Therefore, a resource designed for textual materials might include many subject headings that cannot be visually represented, and it may not contain subject headings specific enough to adequately convey certain visual concepts. Since print materials and visual materials are inherently different, it is necessary to use multiple resources in order to select the best subject headings for each type of material. To that end, there are thesauri specifically designed for use with visual materials. The Art and Architecture Thesaurus (AAT) and The Thesaurus of Graphic Materials (TGM) are two such resources.

This paper will address the issue of subject coverage of standardized vocabularies designed for visual materials, specifically the AAT and TGM. Its purpose is to aid those who catalog visual resources dealing with Islamic or Arabic culture, thus aiding those who will search for these Arabic and Islamic materials being cataloged.

This work will compare the coverage of Arabic and Islamic subject headings among two standardized vocabularies. It will aid catalogers of Arabic and Islamic materials in making informed decisions regarding which of these two thesauri best meets the specific needs of their user population.
Literature Review

The development of standardized vocabularies for use in libraries in the United States has resulted in problems in addressing non-Western cultures (Soltani 1996). There is a body of literature discussing the adaptation of classification schemes and subject headings to fit the needs of libraries in Arabic and Islamic countries. However, while research acknowledges the shortcomings of major classification schemes and subject headings lists, such as the Dewey Decimal Classification (DDC) or Library of Congress Subject Headings (LCSH), the body of literature focusing expressly on the issue of Arabic culture and Islam is sparse.

Much of the literature that concentrates on the shortcomings of subject headings for use in American libraries focuses on the bias that manifests in the most commonly used classification schemes and thesauri, such as the DDC and the LCSH. Bias can manifest in many ways, but when adapting classification schemes for more culturally inclusive purposes in America, addressing ethnocentricity must be the first priority. Olson and Schlegl state that “users must not be regarded as homogenous” (2001, 78). This, needless to say, this is a difficult mindset to battle. Ideally, the public will drive subject headings and the language of the catalog; however, determining who constitutes the “public” is quite complex. While imagining a singular public with only a single perspective is easier than envisioning all the possible population variances, this serves only to further establish the authority of the mainstream opinion, regardless of what percentage of the population the mainstream constitutes. Even in Arabic countries avoiding the dominant view of a singular public is difficult: many Arabic people are Muslims, and many Muslims are Arabic, but not all Arabs are Muslim, and not all
Muslims are Arabic. The majority of the United States population is neither Arabic nor Muslim, but this fact cannot serve as an excuse for insufficient coverage of either the Arabic culture or the Islamic religion.

Although catalogers developed the Library of Congress Subject Headings (LCSH) in the United States for use in United States libraries, its use is widespread in countries around the world because of the advantages of using a system created by an organization which sets standards in the field. Nonetheless, while the LCSH may be a leader in comprehensiveness, “what is left out of LCSH defines its boundaries and illustrates the culture it endorses and enforces” (Olson 2000, 59). One way to limit the bias towards non-majority cultures and religions is to ensure the inclusion of a wide range of subject headings for these cultures and religions.

While having subject headings available for cultures and religions certainly is a step in the right direction, the inclusion of subject headings does not automatically eliminate bias. In addition to exclusion, distortion and marginalization are two further ways in which standardized vocabularies display bias (Olson 2000). Exclusions can mean the overt omission of a topic, or it can mean having to use a general term where a more specific one is needed. Marginalization occurs by placing a topic “outside of the cultural mainstream—making it ‘other’” thereby addressing the topic according to what makes it different (Olson 61). Distortions create a warped picture by inaccurately representing a concept. Addressing these types of bias in standardized vocabularies is crucial, as “distortion makes it easier to ignore topics…exclusion makes topics invisible and marginalization sets them aside” (Olson 62).
In their 2003 article, Kublik et al. sought to make “manageable the development of culturally appropriate classification in a world that is increasingly homogenized” (30). The authors list the first step of creating a classification supplement as “identification of gaps and instances of bias in relation to the marginalized group or culture of interest” (14). Olson emphasizes the importance of eliminating cultural bias in the LCSH: “if a cultural authority reinforces the status quo then it will also reinforce the ascendancy of some and the subordination of others” (2000 59). This should not be the case if the goal of such a work is to provide aid in making information accessible to everyone. Though it may seem like a never-ending task to eliminate cultural bias, it is one toward which everyone must strive.

Five areas to target when seeking to remove cultural bias and improve subject access include: treatment of the topic as an exception to the norm, isolation or “ghettoization” of a topic, absence of the topic by omission, inappropriate structure of the standard, and biased terminology (Olson and Schlegl 2001, 65). The bias found in the subject heading terms is one of the most evident forms (68). This is particularly problematic not only because it affects the ease with which searchers find an item, but also because it “influences cataloguers’ application of classification” (68). The altering of an application of classification further complicates the retrieval of the item for a searcher.

Biased terminology is one aspect of the problem; however, the structure of subject headings and classifications can also reveal bias (Olson and Schlegl 2001). For example, the syndetic structure of subject headings may not draw relationships between associated topics (68). Furthermore, inappropriate groupings and divisions demonstrate an inadequate understanding of other cultures which also contributes to the bias (68).
While biased terminology and structure can create difficulties in cataloging and retrieving items, at least there is a term, though not the ideal one, available. The complete absence of a subject heading term or topic can create additional difficulties, making some topics extremely challenging to represent adequately. A lack of timeliness in updating the standards of subject access may be the cause of omissions, but the issues may also have deeper roots. For instance, “the functionalist paradigm of LCSH makes it difficult to describe different ideological stances” (Olson and Schlegl 2001, 68). In the case of omissions due to timeliness, adding the necessary subject headings may not be very challenging. However, if an entire paradigm shift must take place in order to accommodate alternate ideologies, then considerably more effort may be necessary to add in the missing terminology.

If the necessary subject headings are not available, this limits the possibilities for assembling subject heading strings (Olson and Schlegl 2001, 68). This, consequently, may shift the responsibility of coordination to the searchers by making it necessary to use Boolean searching (68). Since Boolean searching is not a skill everyone masters innately, having to use this mode of searching may further distance the literature of marginalized groups from the user (68).

While standards such as thesauri are valuable tools, they “lose their effectiveness if they are not carefully and equitably applied” (Olson and Schlegl 2001, 78). Similarly, Linnea Marshall discusses the application of subject headings in terms of achieving a balance between the precision and the recall when performing a search. Using only extremely specific headings will return precise results, but in limited numbers and possibly missing relevant items. Conversely, using only general headings will return
many results, but it will likely return too many, and they may not all be relevant. Neither option is preferable: without finding a point of balance, searchers must either wade through results that are not useful or fail to find anything useful at all. Finding the right balance of precision and recall is crucial for optimal accessibility of information, and “what is the purpose of libraries if not to make information accessible?” (Olson 2000, 68-69). However, accessibility can be difficult to achieve due to the variance among the population who might search for a given topic. As Olson comments, “a community in the singular is not totally inclusive. It excludes those who do not fit, those who are different” (2000, 56 original emphasis). While it may not be possible to anticipate all the potential population variances, it is possible to reflect a more culturally diverse world.

In a specific study of Arabic subject headings in the 10th edition of the LCSH, Qamar Mizar concluded that the LCSH was “not entirely inadequate but in some [sic] subjects related to Islam there is room for improvement and expansion” (1992, 12). He cites several specific examples. For instance, “Quran” is the preferred spelling of the name of the Islamic holy book and it is spelled “Koran” in the LCSH. Also, the headings for “criticism” and “interpretation” of the Quran/Koran are objectionable as it is considered the inspired word of God by Muslims. Further, the heading for “Muslim pilgrims and pilgrimages” is inadequate because it does not differentiate between the concepts of Hajj and Umra. The headings for prayer also do not effectively reflect the necessary distinctions between the Islamic concepts. The need for more thorough coverage of non-Western cultures among vocabularies of Western origin continues to grow as our society becomes increasingly global in nature and scope.
The Thesauri

In order to compare the two thesauri fairly, one must first understand the goals of these tools. Any findings of an analysis must be in context to what the thesauri intended to achieve. While both thesauri address the need to accurately describe the diverse world of images and graphic materials, they do so through different means.

The Art and Architecture Thesaurus

The need for “a single rational slide classification scheme” resulted in the development of *The Art and Architecture Thesaurus* (AAT) (Molholt 2001, 153). A preliminary examination of the issue quickly revealed that a common vocabulary was a necessary predecessor to a classification scheme. An investigation into existing vocabularies determined that, by themselves, none of the existing vocabularies were sufficient. This precipitated an effort to develop a vocabulary which would be able to meet the needs of the art and architecture community in a more thorough manner, and the AAT is the result. In general, the purpose of the AAT is to “improve access to information about art, architecture, and material culture” (Getty Research Institute 2004b). Specifically, the AAT strives to assist catalogers, facilitate the retrieval of information, and act as a research tool. It includes approximately 128,000 terms to help achieve this.

The terms in the AAT relate to the visual arts and material culture, from “Antiquity to the present and the scope is global” (Getty Research Institute 2004b). The terms are generic; they do not include proper names or iconographic subjects. The vocabulary grows through the contribution of terms; therefore, the AAT is a compiled resource, expanding and fluctuating over time. Contributors to the vocabulary include
libraries, archives, museums, and other institutions whose work involves the visual arts. Source information for the terms includes reference works, other scholarly and authoritative sources, and possibly information found on art objects.

The AAT is polyhierarchical and meets ISO and NISO standards for a thesaurus in that it also has associative and equivalence relationships. The hierarchical relationship brings concepts together in terms of their broader and narrower contexts. The equivalence relationship brings together terms which refer to the same concept. The associative relationship bring together related terms, such as terms that are cross-references or not otherwise hierarchical or equivalent.

Facet are the major subdivisions of the AAT hierarchy. Each of the seven facets may have one or more hierarchies under it. Each record in the AAT focuses on a concept, and the record includes information associated with the concept. The facets bring together classes of concepts with similar traits. The facets progress from abstract concepts to tangible objects. Each record also includes guide terms, or node labels, which are not used for cataloging but are hierarchical place holders for gathering related concepts. The record displays the term in its place in the hierarchy, making it simple for users to see the relationship between the term and other concepts. For example, “mosque” is under the guide term for “religious structures.” Selecting “religious structures” allows the user to view other terms under the heading of “religious structures.”

**The Thesaurus for Graphic Materials**

The Library of Congress’ Prints and Photographs Division developed *The Thesaurus for Graphic Materials I: Subject Terms (TGM)* to address their cataloging and retrieval needs. This involves the subject indexing of collections of graphic materials.
such as photographs, drawings, and other forms of still image media. The principal function of the TGM is to assist in finding vocabulary to describe subjects of graphic materials. The Library of Congress shares the TGM with museums, libraries, archives, and similar institutions with the intent that it will serve their needs also and will encourage the standardization of the cataloging of images.

The original vocabulary of the TGM is the result of more than 50 years of experience in the Prints and Photographs Division of the Library of Congress. As a result, the terms in the vocabulary reflect only the Library of Congress collection held by the Print and Photograph Division. Catalogers at the Library of Congress add terms as needed in the course of indexing new materials. Therefore, the TGM does not have terms for every imaginable topic. Conversely, it addresses other topics in much more detail. It now contains over 5,000 terms. The TGM does, however, integrate terms from other standard thesauri. While some subjects are the same as those one would find in thesauri for print materials, other subjects are far more prevalent as visual concepts than as concepts in print materials.

The TGM follows the American National Standards Institute (ANSI) guidelines for constructing thesauri. It is useful both for those who produce catalog records and for those who search for catalog records. It includes a wide variety of subject matter, including places, events, types of people, activities, and objects. However, since it only covers subject categories, it does not include names for geographic locations, events, organizations, or people.

The TGM is alphabetical in its organization. When searching for a term, the result displays the term in its alphabetical placement in relation to all other terms as opposed to
its hierarchical placement with related terms. Since an alphabetical list does not make the overall hierarchy readily discernible, terms that are broader, narrower, or otherwise related all have links. Each entry does include the general hierarchy under which the term falls, but one must use the link to access the entire hierarchy. Additionally, some terms may have further subdivisions, such as geographic locations, indicated by a bracketed display of facet indicators below the term.

**Methodology**

The first step to comparing the treatment of terms between thesauri was to select the thesauri to compare. Since this study focused on the visual arts, *The Art and Architecture Thesaurus* and the Library of Congress’ *Thesaurus of Graphic Materials* were ideal for comparison since they both address the needs of image collections.

While any number of artistic techniques could have served as a topic for comparison, architecture offered a combination of general and specific concepts to examine. The basis for choosing the terms compared was their architectural function and their level of architectural detail.

**Terms**

The eighteen terms selected for comparison included

- caravanserais
- dikkas
- hammams
- idgahs
- iwans
- jamis
Some terms deal with general Arabic architecture, while most of these terms deal with the architecture of mosques, since mosques are the main building of focus in the Islamic faith.

See the appendices for complete lists of the terms found in each vocabulary along with definitions of the terms used in this study.

**Comparison of Thesauri**

The *Art and Architecture Thesaurus* (AAT) had a better selection of terms than does *The Thesaurus for Graphic Materials* (TGM). The AAT had all the terms while the TGM had exact matches for only seven of the eighteen terms. Exact matches included minor spelling variations. Only one term had no equivalent available in the TGM.
In the AAT hierarchy, all of the terms fell under the objects facet. Caravanserais, hammams, idgahs, jamis, khans, madrasas, masjids, minarets, mosques, and sabils fell under the classification of “built environment.” For all these terms, the hierarchy of built environments divided further into “single built works,” “single built works by specific type,” and “single built works by function.”

Idgahs, jamis, masjids, minarets, and mosques all fell under “ceremonial structures” and “religious structures.” Jamis, masjids, and mosques fell further under “religious buildings.” Jamis and masjids, both being types of mosques, fell further under “mosques” and “mosques by function.”

Caravanserais and khans fell under “public accommodations.” Hammams fell under “institutional buildings,” “health and welfare facilities,” “health facilities,” and “public baths.” Madrasas fell under “institutional buildings,” “schools,” and “schools by subject.” Sabils fell under “hydraulic structures,” “hydraulic structures by function,” “water distribution structures,” and “fountains.”

The classification of “Component,” included the terms dikkas, iwans, maqsuras, mihrabs, minbars, muqarnas, and qibla walls. They all also fell under “components by specific context.” Iwans fell under “building divisions,” “rooms and spaces by location or context,” and “exterior covered spaces.”

Dikkas, maqsuras, mihrabs, minbars, muqarnas, and qibla walls all fell under architectural elements. However, muqarnas fell under “surface elements and surface element components” and “surface elements,” while the rest of the terms fell under “architectural elements by building type,” “religious building fixtures,” and “Islamic religious building fixtures.”
The classification for “Furnishing And Equipment” had only one term: mastabas (benches). It fell under “furnishings,” “furnishings by form or function,” “furniture,” “furniture by form or function,” “seating furniture,” “multiple-seating furniture,” “benches,” and “benches by form or function.”

In the TGM, the seven terms that had exact matches were caravanserais, dikkas, madrasas, mihrabs, minarets, minbars, and mosques. The other terms searched were not available in the TGM hierarchy. In most cases, it was necessary to use a more general term in the hierarchy in place of a more specific term. Although caravanserais and madrasas have alternative spellings, they nonetheless counted as exact matches, as the spelling variations were not significant since both thesauri list the alternate spelling as a variant spelling. It is, however, important to note that because of the alphabetical arrangement of the TGM, searching for “caravanserais” will not produce “caravansaries” when browsing for terms. Since alphabetically “caravansaries” comes before “caravanserais,” it appears on the previous page.

In the TGM, the two main classifications for the selected terms were “facilities” and “architectural & site components.” Mastabas was the single term which fell under the classification of “furnishings.” Its further classification was “furniture,” “seating furniture,” and finally “benches.” The concept of qibla was the only term for which there was no approximation in the TGM. None of the associated concepts appear as terms in the hierarchy.

In the following descriptions, the searched term is provided first, followed in parentheses by the term available in the TGM that corresponded to the searched term.
The facilities hierarchy includes jamis (mosques), caravanserais (caravansaries), hammams (public baths), khans (public accommodation facilities), madrasas, masjids (mosques), minarets, mosques, and sabils (drinking fountains).

Jamis (mosques), madrasas, masjids (mosques), minarets, and mosques all also fell under the classification of “religious facilities” and then the specific type of building. There was no differentiation between particular kinds of mosques, so jamis and masjids became simply “mosques.” Madrasas also fell under the alternate hierarchy of educational facilities.

Khans and caravanserais fell under the hierarchy of “public accommodation facilities,” and no more specific term for khans were available. Hammams fell under the hierarchy of “health & hygiene facilities” as “public baths.” Sabils fell under the hierarchy as “hydraulic facilities,” “fountains,” and “drinking fountains.”

The “architectural & site components” hierarchy includes dikkas, idgahs (rooms & spaces), iwans (halls), maqsuras (rooms & spaces), mihrabs, minbars, and muqarnas (religious architectural elements).

Idgahs (rooms & spaces), iwans (halls) and maqsuras (rooms & spaces), all fell under “building divisions” and “rooms & spaces.” For idgahs and maqsuras, that was as specific as the hierarchy went. Iwans could be further classified as halls.

Dikkas, mihrabs, minbars, and muqarnas, all fell further under the hierarchy of “religious architectural elements.” For muqarnas, that was as much detail as the hierarchy provided. The other terms all had exact matches, with minbars also further classified as “pulpits.”
For the terms that had exact matches in both thesauri, there were evident similarities between the hierarchies for many of the terms. For example, dikkas, mihrabs, and minbars all fell under “religious architectural elements” in the TGM and under “Islamic religious building fixtures” in the AAT. The specification of the term “Islamic” in the AAT does add value; however, the concepts of “architectural elements” and “building fixtures” were nonetheless very similar in nature. Further, minarets, and mosques both fell under “religious facilities” in the TGM and “religious buildings” in the AAT, while caravanserais fell under “public accommodation facilities” in the TGM and “public accommodations” in the AAT. Madrasa was the one term that, while the terms matched exactly, had a slightly variant hierarchy. In the AAT it fell under “schools by subject” while in the TGM it was accessible through two hierarchies. It fell under both “religious facilities” and “educational facilities,” but there was no combination of the two.

Many of the terms that did not have exact matches between the two thesauri had similar hierarchies and varied only in that the concepts and terms in the TGM were simply not specific enough. Examples of these terms include: hammams, idgahs, iwans, jamis, khans, maqsuras, masjids, mastabas, muqarnas, and sabils. Only two terms vary slightly in their hierarchies: idgahs and maqsuras.

According to the AAT scope notes, an idgah is an “immense, open praying areas with nothing but a qibla wall with a mihrab and an open air pulpit” and a maqsurra is “a private enclosure in a mosque near the mihrab, typically for the use of the caliph or other important person.” In the TGM, which did not provide exact matches for the terms, the closest approximations to the definitions of both terms appear under “architectural & site
componenets,” “building divisions,” and “rooms & spaces.” However, the AAT hierarchy differentiated idgahs as “single built works” and maqsuras as “components.”

This lack of specificity of terms is a major hindrance to both catalogers and searchers. The necessity of having to use a broader term where a more specific term is necessary is known as exclusion (Olson 2000, 60). This occurs frequently in the TGM. Ten of the 11 terms without exact matches in the TGM fell into this category. The previously mentioned terms hammams, idgahs, iwans, jamis, khans, maqsuras, masjids, mastabas, muqarnas, and sabils are the prime examples of this. The hierarchy could have easily included the terms if it went only one level deeper, making both cataloging and retrieval much easier and more effective.

The other term missing from the TGM was “qibla.” Its absence is an example of what Olson and Schlegl (2001) call omission. While exclusion indicates that the hierarchy is not specific enough, omission indicates that the hierarchy is all together absent, and there is no representation for the term (68). “Qibla” was one of those terms in the TGM. Qibla is the direction in which Mecca lies, indicated by the orientation of the mosque so it can be faced for prayer. Searching the TGM for concepts such as prayer, direction, or Mecca, did not provide terms to approximate the concept of qibla. This was the most serious case of omission in the TGM. Fortunately, however, other issues discussed by Olson and Schlegl are not evident in the TGM.

“Ghettoization” is a concept discussed by Olson and Schlegl, of which there is no evidence in either vocabulary. Ghettoization is having all terms for a topic gathered together in one area (Olson and Schlegl 2001, 67). This does not happen in the TGM because it uses an alphabetical display whether performing a search by browsing the
terms or by searching for keywords in context. Searching for keywords in context may aid in finding other related terms, but such is not the case for any of these terms. Although both thesauri provide links to related terms, they also include similar concepts in general, not only those that are Islamic. Neither the AAT nor the TGM segregate all the Islamic terms into one hierarchy. Both divide terms by their architectural form and function, rather than by their cultural origins, thus integrating the terms with other concepts of similar meaning in other cultures.

Neither the AAT or the TGM ghettoize Islamic terms, nor do they marginalize them. Marginalization is the inclusion of terminology that demonstrates what makes the concept different from typical standards (Olson 2000, 60-61). While in the case of Islamic architecture terms it is vital for the terms to reflect the Islamic aspects of the architecture, it is imperative to do so in a way that does not insinuate that Islam is a subordinate culture.

The TGM and AAT also do not show evidence of biased terminology, insofar as the terminology which the TGM offers. It is possible to interpret the lack of TGM terminology as bias evident where broader terms must suffice because there are not exact matches. This, however, is more a case of the hierarchy not reaching to levels specific enough to incorporate those terms than it is of inaccurate terms at the proper level of specificity. Although biased terminology appears to get most of the attention in the literature, the less frequent exploration of other types of bias does not mean they are less important. Instead it may be a sign that the other types of issues are simply “more subtle, more complex or both” (Olson and Schlegl 2001, 69).
Additionally, neither the TGM nor the AAT distort the terms which they include. However, a possible interpretation of the lack of exact matches caused by the fact that the hierarchies simply do not go deep enough could be considered distortion. This lack of specificity, however, does not truly distort the hierarchy of terms that are available, it simply obfuscates the display of the hierarchy for the unavailable terms. The hierarchies themselves are free of distortion, and they do not create a distorted picture of the terms. Rather, they simply lack completeness.

Olson states that “typical systematic biases in [standardized vocabularies] reflect a mainstream status quo” (2000 62). While the terms in these thesauri do not demonstrate a negative bias in terminology, the absence of certain terms in the TGM does seem to indicate the reflection of a mainstream status quo on the basis of how the thesauri add terms. Since the TGM adds terms only as they become necessary for the indexing and cataloging of the Library of Congress’ Prints and Photographs Division, the TGM truly reflects the cataloging done by the Library of Congress. The AAT, a resource compiled through contributions, adds terms in much the same way. The AAT, however, draws its terms from a variety of sources, as opposed to just one, so naturally it has an advantage over the TGM since what the Prints and Photograph Division of the Library of Congress encounters will not be as diverse as what a variety of libraries, museums, and archives encounter in their cataloging.

**Conclusion**

When faced with choosing the most appropriate thesaurus for a particular collection, it is crucial to keep in mind the scope of the cataloging needs for the collection in question and also the potential growth of the collection. The TGM offers some terms
for the cataloging of Islamic architecture images. However, it does not offer very detailed terms for this purpose. The AAT hierarchy offers much more specific Islamic architectural terms. Furthermore, in comparison to the AAT, the way the TGM adds terms limits its potential for expansion, as the AAT draws from a wider pool of contributors. Overall, the AAT offers many more benefits than the TGM does for the cataloging and subsequent retrieval of images of Islamic architecture.
References


### Appendix A

*The Art and Architecture Thesaurus*

<table>
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<th>Terms</th>
<th>AAT</th>
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</tr>
<tr>
<td>Mastabas</td>
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<tr>
<td>Mihrabs</td>
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<td>Minarets</td>
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</tr>
<tr>
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</tr>
<tr>
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<tr>
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<tr>
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<tr>
<td>Sabils</td>
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Appendix B

Definition of Terms: AAT Scope Notes

Caravanserais Use for stations along caravan routes providing overnight accommodations and facilities for caravans and individuals and their animals; generally characterized by large central courtyards, a single entrance and, often, shops.

Dikkas In mosques, high podiums on columns from which the celebrant's assistant repeats his Koran readings and gestures for the more distant worshippers.

Hammams Islamic public baths consisting of a series of cold and hot pools and steam rooms, primarily used for ritual purification; derived in principle from ancient Roman models.

Idgahs Immense, open praying areas with nothing but a qibla wall with a mihrab and an open air pulpit.

Iwans Large vaulted halls having one side open to a court; prevalent in Parthian, Sassanian, and Islamic architecture.

Jamis Places of prayer, usually mosques, for congregations.

Khans Use for urban Islamic structures providing lodging, storage, and commercial space for traveling merchants, as well as some facilities for trading transactions; similar in general function to "caravanserais" but less fortified, more mercantile, and found in urban contexts.

Madrasas Use specifically for Islamic theological or law schools, especially when associated with a mosque, or generally for places of study.

Maqsuras A private enclosure in a mosque near the mihrab, typically for the use of the caliph or other important person.

Masjids Mosques, with a mihrab but no minbar, used for daily prayer by individuals or small groups, but not for Friday worship.

Mastabas Use for Arabic benches built of stone or mudbrick; often placed along the front and sometimes sides of traditional houses or in other areas for lodging or socializing.

Mihrabs Niches, chambers, or slabs in Mosques, indicating the direction of Mecca.
<table>
<thead>
<tr>
<th>Term</th>
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<tbody>
<tr>
<td>Minarets</td>
<td>Tall, slender towers of a mosque, from which the faithful are called to prayer.</td>
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<tr>
<td>Minbars</td>
<td>Pulpits in mosques, having a small stand for the speaker, parapet, canopy, narrow stairs, and usually a gate at the foot of the stairs.</td>
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<tr>
<td>Mosques</td>
<td>Religious buildings.</td>
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<td>Muqarnas</td>
<td>Use for the network of small, repeated cellular forms resembling bottomless niches and sometimes corbeled and structural, more often suspended and decorative, which form the undersurfaces of vaults and domes common in Islamic architecture.</td>
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<tr>
<td>Qibla walls</td>
<td>Walls of a mosque or idgah oriented toward Mecca and usually containing a minbar.</td>
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<tr>
<td>Sabils</td>
<td>Public drinking fountains in Islamic architecture.</td>
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### Appendix C

**The Thesaurus of Graphic Materials**

<table>
<thead>
<tr>
<th>Terms</th>
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Appendix D

**Definition of Terms: TGM Public Notes**

Dikkas  In mosques, a wood or stone raised platform from which the prayer leader's Koran readings and gestures are repeated for worshippers.

Hammams (Public baths) Public buildings for bathing. Includes activities and structures. Search under BATHHOUSES for public facilities containing dressing rooms.

Madrasahs A Muslim college or school.

Mihrabs Niches, chambers, or slabs in mosques, indicating the direction of Mecca.

Minbars Wood or stone pulpits in a mosque usually consisting of steps, a platform and canopy.

Mosques For images that focus on buildings, as well as the associated grounds.