Grey literature as Valuable Resources in National Library of Iran: from Organizing to Digitization

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Abstract

Grey literature is an important source of information due to the uniqueness of the content that gets published. Because commercial publishers are looking to make a profit on the materials they publish, they often overlook niche research areas that serve smaller populations. Grey literature is one way to search for information in emerging or less popular research areas. It seems that it reinforce research and accelerate continuous movement towards having a scientific society. Any source of information that has not been released to the market after printing is considered as grey literature. Grey literature is a special resource that is created for a specific purpose and audience and is replicated finitely. It is impermanent and invisible, and cannot be seen in the directory of publishers, bookshops and libraries.

The National Library of Iran was founded in 1937. The main goal of this organization is collecting, preserving, organizing and disseminating information about printed and non-printed works in Iran, and taking measures and making decisions to guarantee the accuracy, ease and speed of research and study in all fields to promote national culture. In order to achieve these goals, and according to the law, all private and public publishers are required to submit a copy of their publications (book and non-book materials) to the National Library of Iran. There are more than 900 thousand issues in the grey literature group at the National Library, over 240,000 issues of which are digitized. After being collected, these
resources are organized and made available to users. Report, research project, standard and dissertations are among the most important sources of the National Library of Iran’s grey literature, used by many researchers daily. In this research, the process of collecting, organizing and disseminating of information of these sources in the National Library of Iran will be expressed as a successful practical experience. Besides, it will be shown how the National Library of Iran has dealt with the problems it faced with.

Keywords: Grey literatures, Collecting, Organizing, Digitizing, Dissemination of information, National Library of Iran

Introduction

Whenever concern is expressed at the continually increasing quantity of grey literature, and at the difficulty it presents to librarians, information workers and documentation experts on the one hand, and to readers and users on the other, the reply which is often given is that such publications are not intended to form part of the permanent literature, and consequently any problems that may arise will be purely temporary. Those who prepare and issue grey literature do so because such documents offer a number of advantages over other means of dissemination, including greater speed, greater flexibility and the opportunity to go into considerable detail if necessary. Another important reason why grey literature has attained significance as a separate medium of communication is because of an initial need for security or confidentiality classifications which prevent documents from being published in the conventional manner. Over the years, grey literature has come to constitute a section of publications ranking in importance with journals, books, serials and specifications. Any subjective feelings that grey literature is being used and quoted more and more are borne out by the many independent references to it, and by the emergence of databases devoted specifically to standardizing its identification and improving its accessibility.

What is Gray Literature?

The problem of trying to define items of grey literature is one which is well known to the life scientist – it is rather like trying to define the species. Everyone can recognize a piece of grey literature when they see it, but it is not easy to write an explanation which covers all the exceptions (Auger, 1997).

The Fourth International Conference on Grey Literature (GL '99) in Washington, DC, in October 1999 defined grey literature as follows: "That which is produced on all levels of government, academics, business and industry in print and electronic formats, but which is not controlled by commercial publishers."

In general, grey literature publications are non-conventional, fugitive, and sometimes ephemeral publications. They may include, but are not limited to the following types of materials:

- Reports (pre-prints, preliminary progress and advanced reports, technical reports, statistical reports, state-of-the art reports, market research reports, government reports, etc.)
• Theses and dissertations.
• Conference proceedings
• Technical specifications and standards
• Non-commercial translations
• Bibliographies
• Policy statements and issues papers.
• Pre-prints and post-prints of articles.
• Geological and geophysical surveys.
• Maps.
• Newsletters and bulletins.
• Fact sheets.
• Technical and commercial documentation, and official documents not published commercially (primarily government reports and documents) (Alberani, 1990).

Characteristics of Grey Literature

1. Not primarily produced for commercial publications
2. Production as a means of getting a message across rather than publishing as a commercial venture (for project or otherwise)
3. Difficult to acquire
4. Not part of a major distribution channels
5. Few, if any bibliographic controls e.g. lack of ISBN or ISSN
6. Not peer reviewed
7. Transient or ephemeral in nature
8. Difficult to find because historically, it is not included in commercial abstracting and indexing database

The importance of grey literature

Much grey literature is of high quality. Grey literature is often the best source of up-to-date research on certain topics (Grey literature, 2019).

Grey literature is an important source of information. It can often be produced more quickly as it has greater flexibility. It serves scholars and lay readers alike with research summaries, facts, statistics, and other data that offer a more comprehensive view of the topic interest.

The following are some of the importance of grey literature publications:

✓ It can provide information that often is unavailable in published open sources
✓ It is often available on timelier basis than conventional literature.
Conference papers, for example, are available long before any follow-on, published article will appear, yet the information content of the two versions may not differ significantly.

It can corroborate important assertions found in other sources, which is always paramount in intelligence analysis.

It may have a concise, focused, and detailed content. This is particularly true of technical reports and unofficial government documents, whose information content will be greatly reduced in the published form.

The literature is always free, relevant and unique.

It is becoming a common means of information exchange, particularly as personal publishing software improves and Internet access expands (Soule and Ryan, 1999).

Grey literature is an important source of information due to the uniqueness of the content that gets published. Because commercial publishers are looking to make a profit on the materials they publish, they often overlook niche research areas that serve smaller populations. Grey literature is one way to search for information in emerging or less popular research areas. Grey literature can sometimes be more current that commercially published information. It does not go through the potentially time-consuming peer-review process undertaken by commercial publishers, and therefore has a quicker turnaround time for dissemination. Other benefits are that grey literature is more likely to report studies that ceased prematurely, as well as innovative pilot projects.

Grey literature in National Library of Iran

The National Library and Archives of Iran are a scientific, research, and service providing institution which was established in 1937. According to its legal duties, the National Library is responsible for acquiring and preserving the following resources through deposit, exchange, donation and purchase. every book and non-book material which is published in Iran, or by Iranian living abroad, all materials in the field of Iranian and Islamic studies especially about Islamic Republic of Iran, as well as scientific, technological, and cultural works published in different countries and in different languages.

- Deposit; according to the law, all private and public publishers are required to submit a copy of their publications (book and non-book materials) to the National Library of Iran.
- Exchange and Donation; some of the resources of the library are provided by exchange of materials with National Libraries, other libraries and academic and research centers in Iran and the world. In addition, some resources are provided through donation of legal and real entities and public or private organizations.
- Purchase; purchase of books and periodicals mainly in languages other than Persian on Islamic and Iranian studies, studies related to Islamic Republic of Iran and also reference and scientific works is one of the ways for collection development in the National Library of Iran.
The main goal of this organization is collecting, preserving, organizing and disseminating information in the form of printed and non-printed works in Iran, as well as taking measures and making decisions to guarantee the accuracy, ease and speed of research and study in all fields. In order to achieve these goals, collection management is performed through various means such as cataloguing, classifying, documentation, indexing and abstracting according to international standards. This policy has resulted in fast and comprehensive retrieval of library materials.

There are more than 3 million and 500 thousand titles of information sources in the National Library of Iran, of which more than 993,000 titles (about 28% of the total resources) are classified in the grey literature resources group. These resources include theses, research projects, standards, pamphlets, posters, leaflets, etc., which are used by a large number of researchers daily. Table 1 lists Frequency distribution of different types of grey literature resources in National Library of Iran.

Table 1. Frequency distribution of different types of grey literature in NLI.

<table>
<thead>
<tr>
<th>NO.</th>
<th>Types of grey resources</th>
<th>Frequency</th>
<th>percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Announcement</td>
<td>14578</td>
<td>1.47</td>
</tr>
<tr>
<td>2</td>
<td>Brochure</td>
<td>15806</td>
<td>1.6</td>
</tr>
<tr>
<td>3</td>
<td>Bulletin</td>
<td>1630</td>
<td>0.26</td>
</tr>
<tr>
<td>4</td>
<td>Directory</td>
<td>5</td>
<td>0.01</td>
</tr>
<tr>
<td>5</td>
<td>Dissertation and thesis</td>
<td>306700</td>
<td>30.86</td>
</tr>
<tr>
<td>6</td>
<td>Document</td>
<td>553506</td>
<td>55.69</td>
</tr>
<tr>
<td>7</td>
<td>Newsletter</td>
<td>1235</td>
<td>0.21</td>
</tr>
<tr>
<td>8</td>
<td>Pamphlet</td>
<td>13180</td>
<td>1.33</td>
</tr>
<tr>
<td>9</td>
<td>Poster</td>
<td>20453</td>
<td>2.1</td>
</tr>
<tr>
<td>10</td>
<td>Report</td>
<td>26132</td>
<td>2.27</td>
</tr>
<tr>
<td>11</td>
<td>Research plan</td>
<td>9897</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>Resume</td>
<td>3287</td>
<td>0.43</td>
</tr>
<tr>
<td>13</td>
<td>Standard</td>
<td>27499</td>
<td>2.77</td>
</tr>
<tr>
<td>SUM</td>
<td></td>
<td>993908</td>
<td>100</td>
</tr>
</tbody>
</table>

As the table above shows, the largest amount of gray literature in the NLI is related to documents (%55.69) and the lowest amount is related to the directories (less than %0.01).

After the documents, theses (%30.86), standards (%2.77), reports (%2.27), posters (%2.1), brochures (%1.6), announcements (%1.47), pamphlets (%1.33), research plans (%1), resumes (%0.43), bulletins (%0.26), and newsletters (%0.21) have a largest number of grey literature in the NLI.

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1. National Library of Iran.
Grey literature are collected and organized in the National Library of Iran through the depository law, purchase, exchange and donation. The depository law of non-book resources was approved in 1999. According to the law, all governmental and nongovernmental producers of non-book resources have to deliver two copies of their works to the National Library of Iran. One of the most important of these resources is dissertations and theses that students and researchers use in the NLI. Approximately 150 graduate and postgraduate researchers come to the National Library for their academic research and use these resources daily. Another gateway is exchange and donation of resources to the NLI through which the library resources are added. After collecting grey literature, the first step to organize these resources is processing and cataloguing. This process helps researchers to access the resources by searching in the library software.

Cataloguing of resources in National Library of Iran is based on the standard named IRANMARK which is based on UNI MARK and customized.
UNIMARC is a specific implementation of ISO 2709, an international standard that specifies the structure of records containing bibliographic data. It specifies that every bibliographic record prepared for exchange conforming to the standard must consist of:

- A RECORD LABEL consisting of 24 characters,
- A DIRECTORY consisting of a 3-digit tag of each data field, along with its length and its starting character position relative to the first data field,
- DATA FIELDS of variable length, each separated by a field separator.

Resource cataloguing based on MARK does not have long history in NLI. In addition, cataloguing according to this standard and completing all information blocks for each record is an extremely time-consuming process and due to the large number of resources received daily by the NLI, most of them are catalogued descriptively and their analytical cataloguing—including indexing—is being completed gradually. Descriptor, scope and content, electronic location and access and added entries are added based on IRANMARK in the analytical cataloguing of grey literature.

The main goal of organizing resources in the NLI is dissemination of information and resource accessibility for users. To achieve this goal, the information of each source is entered in RASA software—comprehensive software of National Library of Iran—so that users can access bibliographic information inside and outside the library via OPAC.

In recent years, digitization project have begun to facilitate users’ access to resources. Theses and documents are one of the most important grey literatures in the NLI that have been digitized and located in digital library of National Library of Iran. So far, more than 400,000 titles of grey literature have been digitized.

Table 2 presents the frequency and percentage of grey literature that has been descriptively catalogued, analytically catalogued and digitized separately.

<table>
<thead>
<tr>
<th>Statistical indicators</th>
<th>methods</th>
<th>Descriptive cataloguing</th>
<th>Analytical cataloguing</th>
<th>digitizing</th>
</tr>
</thead>
<tbody>
<tr>
<td>frequency</td>
<td>993908</td>
<td>688593</td>
<td>400152</td>
<td></td>
</tr>
<tr>
<td>percentage</td>
<td>100</td>
<td>69.28</td>
<td>40.26</td>
<td></td>
</tr>
</tbody>
</table>

As the table above shows, all types of grey literature have descriptive cataloguing. This part of cataloguing includes the title and the author's name, publishing status, appearance, and notes, including abstract.69.28% of these resources also have analytical cataloguing. This part of cataloguing includes subject or descriptor, scope and content, electronic location and access as well as added entries. Only 40.26% of the resources have been digitized.

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2. [http://opac.nlai.ir](http://opac.nlai.ir)
3. [http://dl.nlai.ir](http://dl.nlai.ir)
Users require presenting in the National Library of Iran to study grey literature. They can study these resources both in print and in digital formats. Only the bibliographic information of these resources can be searched through the OPAC, and users can only access the digital format of these resources through digital section inside the NLI (due to compliance with copyright law). Table 3 presents accessibility methods to grey literature in the NLI.

Table3. Accessibility methods to grey literature in NLI

<table>
<thead>
<tr>
<th>Accessibility methods</th>
<th>Only printed format</th>
<th>Only digital format</th>
<th>Both of them</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistical indicators</td>
<td>frequency</td>
<td>percentage</td>
<td></td>
</tr>
<tr>
<td></td>
<td>599156</td>
<td>59.95</td>
<td></td>
</tr>
<tr>
<td></td>
<td>329594</td>
<td>32.98</td>
<td></td>
</tr>
<tr>
<td></td>
<td>70558</td>
<td>7.07</td>
<td></td>
</tr>
</tbody>
</table>

As Table 3 shows most access to resources is in printed format with %59.95. Only %32.98 of these resources is in digital format. Access to both printed and digital formats is %7.07. This is only for researchers who want to study the original resource.
According to the loan service survey, the amount of loaning and studying grey literature is about 20% of the total resources that were loaned by users in the NLI. 175,000 grey literature loaned by users in the NLI over the past year (from April 2018 to April 2019). Most requests are related to the theses, documents and reports. The lack of search for grey literature based on the descriptor or subject due to their incomplete cataloguing is one of the reasons for the imbalance in the use of them by users, so that users in some cases are unaware of such resources in the NLI unless the reference librarians help them to identify resources needed.
Conclusion

On the one hand to identify these resources and follow-up receiving them by the NLI is difficult because of the lack of an official publisher, the difficulty of locating, documents not being officially registered in anywhere, the lack of a standardized template, and the lack of ISBNs or ISSN. On the other hand, these have led scholars to call them ephemeral resources.

One of the reasons for the lack of some of these resources, such as directories, is the lack of an accurate and comprehensive definition of these resources, which has led not to be catalogued in the book database.

In order to have a rich collection of grey literature, it is necessary to pay attention to all methods of collecting these resources such as depository, purchase, exchange and even direct communication with private and public publishers. Therefore, it is necessary to develop a long-term and continuous program for providing all grey literature in the National Library of Iran. It should be noted that only the dissertations of Islamic Azad University and the government documents are deposited to the National Library of Iran.

All grey literature are not organized in the same way. For example organizing theses, documents and standards are done completely, but the others are not. The information content, the lack of formal publication and the lack of formal distribution channels can be regarded as the causes.

Finally, the following proposals are suggested:

✓ Preparing an instruction for the collection, organization, and dissemination of grey literature;
✓ Establishment of a grey literature selection committee;
✓ Preparing the union catalogs of grey literature;
✓ Collecting different types of grey literature from other organizations;
✓ Holding organizing grey literature training courses for librarians.
References

National Library of Iran official website: www.nlai.ir