CHAPTER -6
INTEGRATION OF SOCIAL SCIENCE THESAURUS WITH OPEN INDEX INITIATIVE (OII)

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CHAPTER - 6

INTEGRATION OF SOCIAL SCIENCE THESAURUS WITH OPEN INDEX INITIATIVE (OII)

6.1 Introduction

The thesaurus for Indian social science literature under this research has been constructed on a relational database management system (RDBMS) with maximum semantic relations. An attempt has been made to include maximum keywords in the thesaurus. Out of 4686 keywords, there are 3957 descriptors and 729 non-descriptors with 1042 scope notes. An interface between OII data input worksheet and thesaurus is an essential requirement so that the end users can pick the relevant keywords from the thesaurus and transfer the same to the corresponding field in the data input worksheet. A computer programme developed using PHP scripting language and JavaScript meets this essential requirement. This research study has used an open source software called 'Tematres’ to develop the thesaurus which ultimately stores all the keywords with relations on MySQL - a Relational Database Management System (RDBMS). The entire thesaurus, with relations, resides on the below mentioned five MySQL tables:

\[m\texttt{\_tema}, m\texttt{\_tabla\_rel}, m\texttt{\_values}, m\texttt{\_indice}, m\texttt{\_notas}\]

The table called \textit{m\_tema} stores all the descriptors and non-descriptors with corresponding unique identifiers. The table \textit{m\_tabla\_rel} provides relations to all the descriptors and non-descriptors. The third table \textit{m\_values} contains the information on the relation type such as USE, USED FOR (UF), NARROW TERM(NT) and BROAD TERM(BT), etc. The fourth table namely, \textit{m\_indice} correlates all the descriptors and non-descriptors and provides relation between
keywords and link to the descriptors and non-descriptors as well. The fifth and last table \textit{m_notas} contains all the scope notes assigned to various keywords.

<table>
<thead>
<tr>
<th>tema_id</th>
<th>code</th>
<th>tema</th>
<th>tesauro_id</th>
<th>uid</th>
<th>cuando</th>
<th>uid_final</th>
<th>cuando_final</th>
<th>estado_id</th>
<th>cuando_estado</th>
<th>isMetaTerm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>1</td>
<td>1</td>
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<td>NULL</td>
<td>NULL</td>
<td>13</td>
<td>2016-04-10 16:02:24</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>NULL</td>
<td>Abum /Admi Party</td>
<td>1</td>
<td>1</td>
<td>2016-04-10 16:02:24</td>
<td>NULL</td>
<td>NULL</td>
<td>13</td>
<td>2016-04-10 16:02:24</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>NULL</td>
<td>AAP</td>
<td>1</td>
<td>1</td>
<td>2016-04-10 16:02:24</td>
<td>NULL</td>
<td>NULL</td>
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<td>2016-04-10 16:02:24</td>
<td>0</td>
</tr>
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<td>4</td>
<td>NULL</td>
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<td>1</td>
<td>2016-04-13 16:14:55</td>
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</tr>
<tr>
<td>5</td>
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<td>1</td>
<td>1</td>
<td>2016-04-10 16:02:24</td>
<td>NULL</td>
<td>NULL</td>
<td>13</td>
<td>2016-04-10 16:02:24</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>NULL</td>
<td>Academic Achievement</td>
<td>1</td>
<td>1</td>
<td>2016-04-10 16:02:24</td>
<td>NULL</td>
<td>NULL</td>
<td>13</td>
<td>2016-04-10 16:02:24</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>NULL</td>
<td>Ability Identification</td>
<td>1</td>
<td>1</td>
<td>2016-04-10 16:02:24</td>
<td>NULL</td>
<td>NULL</td>
<td>13</td>
<td>2016-04-10 16:02:24</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>NULL</td>
<td>Ability Testing</td>
<td>1</td>
<td>1</td>
<td>2016-04-10 16:02:24</td>
<td>NULL</td>
<td>NULL</td>
<td>13</td>
<td>2016-04-10 16:02:24</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>NULL</td>
<td>Abor Tribe</td>
<td>1</td>
<td>1</td>
<td>2016-04-10 16:02:24</td>
<td>NULL</td>
<td>NULL</td>
<td>13</td>
<td>2016-04-10 16:02:24</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>NULL</td>
<td>Tribals</td>
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<td>1</td>
<td>2016-04-10 16:02:24</td>
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<td>NULL</td>
<td>13</td>
<td>2016-04-10 16:02:24</td>
<td>0</td>
</tr>
<tr>
<td>11</td>
<td>NULL</td>
<td>Aboriginal Tribes</td>
<td>1</td>
<td>1</td>
<td>2016-04-10 16:02:24</td>
<td>1</td>
<td>2016-04-13 16:15</td>
<td>13</td>
<td>2016-04-10 16:02:24</td>
<td>0</td>
</tr>
<tr>
<td>12</td>
<td>NULL</td>
<td>Abortion</td>
<td>1</td>
<td>1</td>
<td>2016-04-10 16:02:24</td>
<td>NULL</td>
<td>NULL</td>
<td>13</td>
<td>2016-04-10 16:02:24</td>
<td>0</td>
</tr>
<tr>
<td>13</td>
<td>NULL</td>
<td>Foetide</td>
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<td>1</td>
<td>2016-04-10 16:02:24</td>
<td>NULL</td>
<td>NULL</td>
<td>13</td>
<td>2016-04-10 16:02:24</td>
<td>0</td>
</tr>
<tr>
<td>14</td>
<td>NULL</td>
<td>Medical Termination of Pregnancy</td>
<td>1</td>
<td>1</td>
<td>2016-04-10 16:02:24</td>
<td>1</td>
<td>2016-04-14 12:14:49</td>
<td>13</td>
<td>2016-04-10 16:02:24</td>
<td>0</td>
</tr>
<tr>
<td>15</td>
<td>NULL</td>
<td>Miscarrage</td>
<td>1</td>
<td>1</td>
<td>2016-04-10 16:02:24</td>
<td>NULL</td>
<td>NULL</td>
<td>13</td>
<td>2016-04-10 16:02:24</td>
<td>0</td>
</tr>
</tbody>
</table>

**Figure - 1: SQL Table m_tema**

<table>
<thead>
<tr>
<th>id_mayor</th>
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<th>t_relacion</th>
<th>rel_rel_id</th>
<th>id</th>
<th>uid</th>
<th>cuando</th>
</tr>
</thead>
<tbody>
<tr>
<td>47</td>
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<td>3</td>
<td>3</td>
<td>0</td>
<td>3984</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>6</td>
<td>2</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>13</td>
<td>14</td>
<td>4</td>
<td>0</td>
<td>8</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>12</td>
<td>4</td>
<td>0</td>
<td>11</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>18</td>
<td>19</td>
<td>3</td>
<td>0</td>
<td>12</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>18</td>
<td>20</td>
<td>3</td>
<td>0</td>
<td>13</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td>18</td>
<td>21</td>
<td>3</td>
<td>0</td>
<td>14</td>
<td>14</td>
<td>1</td>
</tr>
<tr>
<td>18</td>
<td>22</td>
<td>3</td>
<td>0</td>
<td>15</td>
<td>15</td>
<td>1</td>
</tr>
</tbody>
</table>

**Figure - 2: SQL Table m_tabla_rel**

(236)
<table>
<thead>
<tr>
<th>value_id</th>
<th>value_type</th>
<th>value</th>
<th>value_order</th>
<th>value_code</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>t_relacion</td>
<td>Termino relacionado</td>
<td>NULL</td>
<td>TR</td>
</tr>
<tr>
<td>3</td>
<td>t_relacion</td>
<td>Termino superior</td>
<td>NULL</td>
<td>TG</td>
</tr>
<tr>
<td>4</td>
<td>t_relacion</td>
<td>Usado por</td>
<td>NULL</td>
<td>UP</td>
</tr>
<tr>
<td>5</td>
<td>t_relacion</td>
<td>Equivalent parcial</td>
<td>NULL</td>
<td>EQ_P</td>
</tr>
<tr>
<td>6</td>
<td>t_relacion</td>
<td>Equivalent total</td>
<td>NULL</td>
<td>EQ</td>
</tr>
<tr>
<td>7</td>
<td>t_relacion</td>
<td>No equivalencia</td>
<td>NULL</td>
<td>EQ_NO</td>
</tr>
<tr>
<td>8</td>
<td>t_nota</td>
<td>Nota de alcance</td>
<td>1</td>
<td>NA</td>
</tr>
<tr>
<td>9</td>
<td>t_nota</td>
<td>Nota historica</td>
<td>2</td>
<td>NH</td>
</tr>
<tr>
<td>10</td>
<td>t_nota</td>
<td>Nota bibliográfica</td>
<td>3</td>
<td>NB</td>
</tr>
<tr>
<td>11</td>
<td>t_nota</td>
<td>Nota privada</td>
<td>4</td>
<td>NP</td>
</tr>
<tr>
<td>1</td>
<td>t_usuario</td>
<td>Admin</td>
<td>NULL</td>
<td>admin</td>
</tr>
<tr>
<td>12</td>
<td>t_estado</td>
<td>termino candidato</td>
<td>1</td>
<td>C</td>
</tr>
<tr>
<td>13</td>
<td>t_estado</td>
<td>termino activo</td>
<td>2</td>
<td>A</td>
</tr>
<tr>
<td>14</td>
<td>t_estado</td>
<td>termino rechazado</td>
<td>3</td>
<td>R</td>
</tr>
<tr>
<td>15</td>
<td>t_nota</td>
<td>Nota catalográfica</td>
<td>2</td>
<td>NC</td>
</tr>
<tr>
<td>16</td>
<td>config</td>
<td>_USE_CODE</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>17</td>
<td>config</td>
<td>_SHOW_CODEC</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>18</td>
<td>config</td>
<td>CFG_MAX_TREE_DEEP</td>
<td>NULL</td>
<td>3</td>
</tr>
<tr>
<td>19</td>
<td>config</td>
<td>CFG_VIEW_STATUS</td>
<td>NULL</td>
<td>0</td>
</tr>
<tr>
<td>20</td>
<td>config</td>
<td>CFG_SIMPLE_WEB_SERVICE</td>
<td>NULL</td>
<td>1</td>
</tr>
<tr>
<td>21</td>
<td>config</td>
<td>CFG_NUM_SHOW_TERMSxSTATUS</td>
<td>NULL</td>
<td>200</td>
</tr>
<tr>
<td>22</td>
<td>config</td>
<td>CFG_MIN_SEARCH_SIZE</td>
<td>NULL</td>
<td>2</td>
</tr>
<tr>
<td>23</td>
<td>config</td>
<td>_SHOW_TREE</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>24</td>
<td>config</td>
<td>_PUBLISH_SKOS</td>
<td>1</td>
<td>0</td>
</tr>
</tbody>
</table>

**Figure - 3: SQL Table m_values**
### Figure - 4: SQL Table m_indice

<table>
<thead>
<tr>
<th>tema_id</th>
<th>indice</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>4:4710</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>8</td>
<td>5:8</td>
</tr>
<tr>
<td>9</td>
<td>1414</td>
</tr>
<tr>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>19</td>
<td>18:19</td>
</tr>
<tr>
<td>6</td>
<td>23:6</td>
</tr>
</tbody>
</table>

### Figure - 5: SQL Table m_notas

<table>
<thead>
<tr>
<th>id</th>
<th>id_tema</th>
<th>tipo_nota</th>
<th>lang_nota</th>
<th>nota</th>
<th>cuando</th>
<th>uid</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>NA</td>
<td>en</td>
<td>Aarhar and is a 17-digit unique identification num</td>
<td>2016-04-26 17:48:26</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>NA</td>
<td>en</td>
<td>Selection or classification of students for school...</td>
<td>2016-04-10 16:02:24</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>56</td>
<td>NA</td>
<td>en</td>
<td>Acid precipitation. Deposition of acidic component...</td>
<td>2016-04-14 23:36:17</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>133</td>
<td>NA</td>
<td>en</td>
<td>A formal or informal industry manufacturing ince...</td>
<td>2016-04-10 15:52:25</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>270</td>
<td>NA</td>
<td>en</td>
<td>AIADMK is a political party in Southern India</td>
<td>2016-04-24 18:45:05</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>355</td>
<td>NA</td>
<td>en</td>
<td>People who have mixed Indian and English ancestry</td>
<td>2016-04-10 16:02:27</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>368</td>
<td>NA</td>
<td>en</td>
<td>Anti-Brahminism is an ideology that protests against</td>
<td>2016-04-10 16:02:27</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>393</td>
<td>NA</td>
<td>en</td>
<td>A fruit from a variety of Palm eaten by Indians af...</td>
<td>2016-04-10 16:02:27</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>407</td>
<td>NA</td>
<td>en</td>
<td>People engaged in traditional arts.</td>
<td>2016-04-10 16:02:27</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>408</td>
<td>NA</td>
<td>en</td>
<td>Includes actors, musicians, dramatists, etc.</td>
<td>2016-04-10 16:02:27</td>
<td>1</td>
</tr>
</tbody>
</table>
6.2 Programme Code for Integration of Social Science Thesaurus

Below described is the PHP programme along with javaScript developed to integrate thesaurus with OII data input worksheet.

```html
<html>
<head>
    <title>Indian Social Science Thesaurus<br>Miteshkumar Pandya</title>
    <script type="text/javascript" src="jquery.js"></script>
    <script type='text/javascript' src='jquery.autocomplete.js'></script>
    <link rel="stylesheet" type="text/css" href="jquery.autocomplete.css" />
</head>
<body>
    <script type="text/javascript">
        $(document).ready(function () {
            $("#subject").autocomplete("list.php", { width: 382, matchContains: true, selectFirst: false });
        });
    </script>
    <script language="javascript" type="text/javascript">
        $(document).ready(function () {
            $('#btnSubmit').click(function () {
                var subject = new Array();
                $('.input[name=check_subject]:checked').each(function () {
                    subject.push(this.value);
                });
                //alert("Number of Subject: " + subject.length + "\n" + "And, they are: " + subject.join("\%");
                var hiddenvalue = $('#hidden_value').val();
                if (hiddenvalue == '') {
                    $('#hidden_value').val(subject.join("\%"));
                } else {
                    $('#hidden_value').val(hiddenvalue + "\%
" + subject.join("\%"));
                };
            });
        });
    </script>
</body>
</html>
```
$(document).ready(function () {
    $('#btnclose').click(function () {
        var subject = $('#hidden_value').val();
        var finalvalue = opener.document.frm_main.value_e.value;
        if (finalvalue == '') {
            opener.document.frm_main.value_e.value = subject;
        } else {
            opener.document.frm_main.value_e.value = finalvalue + '%' + subject;
        }
        self.close();
    });
});
</script>
</center> <h3><font face = "Tahoma">Indian Social Science Thesaurus</font></h1></center></head>
<body>

<?php
// require('header.php');?

<div id="content">
<form action="" method="post" name="frm_search">
<table bgcolor="pink" border="1">
<tr>
    <td>
        Subject Heading <label>:</label><input type="text" size="50" name="subject" id="subject" />
    </td>
</tr><tr>
    <td><input type="submit" value="Search" /></td>
</tr><tr>
    <td align="center" id="hidden_value" ><?php echo isset($_REQUEST['hid_data']) ? $_REQUEST['hid_data'] : ''; ?></td>
</tr>
<tr><tr>
    <td align="center">Selection Area</td>
</tr>
<tr>
    <td align="center">Close Window</td>
</tr>
</form>
</div>

(240)
<?php
include 'db.php';
session_start();
if (isset($_POST['subject'])) {
    echo "Please click on check box and submit to select the term:<br><br>";

    $sqlmain = mysql_query("SELECT * FROM `m_tema` WHERE `tema` = "$" . $_POST['subject'] . ";");
    while ($row_1 = mysql_fetch_array($sqlmain)) {
        $scopenote = mysql_query("select * from m_notas where id_tema =" . $row_1['tema_id'] . ";");
        while($scoperow = mysql_fetch_array($scopenote)){
            echo '<b>Scope Note : </b>' . $scoperow['nota'] . '<br><p></b>' . $row_1['tema'] . '<br><p>
        }
        $chkquery = mysql_query("select * from m_tabla_rel where id_mayor =" . $row_1['tema_id'] . " or id_menor=" . $row_1['tema_id'] . ";");
        if (mysql_num_rows($chkquery) != 0) {
            $query2 = mysql_query("SELECT * FROM `m_tabla_rel` WHERE `id_menor` = "$" . $row_1['tema_id'] . ";");
            $ntquery = mysql_query("SELECT * from `m_tabla_rel` WHERE `id_mayor` = "$" . $row_1['tema_id'] . ";");
            if (mysql_num_rows($query2) != 0) {
                echo '<b><p style="margin-left:0px;"<input type="checkbox" name="check_subject" id="check_ . $row_1['tema'] . " value="" . $row_1['tema'] . "/'>$row_1['tema'] . '<br><p></b>
                while ($row2 = mysql_fetch_array($query2, MYSQL_ASSOC)) {
                    $query3 = mysql_query("select * from `m_values` where value_id =" . $row2['t_relacion'] . ";");
                    $query4 = mysql_query("select * from m_tema where tema_id =" . $row2['id_mayor'] . ";");
                }
            }
        }
    }
}
$row4 = mysql_fetch_array($query4, MYSQLI_ASSOC);

while ($row3 = mysql_fetch_array($query3, MYSQLI_ASSOC)) {
    if ($row3['value'] == 'Termino superior') {
        echo '<p style="margin-left:35px;">' . $row4['tema'] . ' <input type="checkbox" name="check_subject" id="check_' . $row4['tema'] . '_check_subject" value="' . $row4['tema'] . '">
        <b><font color="green">BT</font></b> ' . $row4['tema'] . '</p>
    }
    if ($row3['value'] == 'Usado por') {
        $uf[] = $row4['tema']; //echo '<p style="margin-left:70px;">' . $row4['tema'] . '</p>' . $row4['tema'] . '</b><font color="green">UF</font>' . $row4['tema'] . '</p>';
    }
    if ($row3['value'] == 'Termino relacionado') {
        echo '<p style="margin-left:35px;">' . $row4['tema'] . '</p>' . $row4['tema'] . '</b><font color="green">RT</font>' . $row4['tema'] . '</p>';
    }
}

while ($row5 = mysql_fetch_array($ntquery, MYSQLI_ASSOC)) {
    $usequery = mysql_query("select *
from m_tabla_rel
where id_mayor = " . $row_1['tema_id'] . ""; .
    while ($rowusequery = mysql_fetch_array($usequery, MYSQLI_ASSOC)) {
        $use = mysql_query("select *
from m_tema
where tema_id = " . $rowusequery['id_menor'] . ""; .
        $result = mysql_fetch_array($use, MYSQLI_ASSOC);
        echo '<p style="margin-left:35px;">' . $result['tema'] . ' <input type="checkbox" name="check_subject" id="check_' . $result['tema'] . '_check_subject" value="' . $result['tema'] . '">
        <b><font color="green">USE</font></b> ' . $result['tema'] . '</p>' . $result['tema'] . '</b><font color="green"> USE</font>' . $result['tema'] . '</p>';
    }
    while ($row5 = mysql_fetch_array($ntquery, MYSQLI_ASSOC)) {
}
$query3 = mysql_query("select * from `m_values` where value_id =" . $row5['t_relacion'] . "'");

$query4 = mysql_query("select * from m_tema where tema_id =" . $row5['id_menor'] . "'");

$row4 = mysql_fetch_array($query4, MYSQLI_ASSOC);
while ($row3 = mysql_fetch_array($query3, MYSQLI_ASSOC)) {
    if ($row3['value'] == 'Termino superior') {
        echo '&lt;p style="margin-left:35px;">' .
        '<input type="checkbox" name="check_subject" id="check_ .
        $row4['tema'] . "value="" . $row4['tema'] . "'/" .
        '<b><font color="green">NT &lt;/font&gt;&lt;/b&gt;' .
        $row4['tema'] . "<br>&lt;/p&gt;';
    
    }
}
if (isset($uf)) {
    foreach ($uf as $val) {
        echo '&lt;p style="margin-left:70px;">' .
        '<b><font color="green">UF &lt;/font&gt;&lt;/b&gt;' . $val . "<br>&lt;/p&gt;';
    }
} else {
    echo '&lt;b&gt;&lt;p style="margin-left:0px;">' .
    '<input type="checkbox" name="check_subject" id="check_ .
    $_POST['subject'] . "value="" . $_POST['subject'] . "'/" .
    $_POST['subject'] . "<br>&lt;/p&gt;';
    }
} else {
    echo "Please click on check box and submit to select the term:";
    ?
    <input type="button" id="btnSubmit" value="Submit" />
</form>

&lt;/div&gt;
<br />
</body&gt;
&lt;/html&gt;
6.3 Steps for Assigning Keywords

OII in its earlier theoretical model integrated GESIS thesaurus developed by Schott (2006), Leibniz Institute for the Social Sciences, Germany, with its data input worksheet. However, OII has implemented GESIS in its working model as this was not found be suitable for indexing social science literature emanating from India. GESIS thesaurus was found to be best suited for indexing social science literature emanating from Germany. It was also observed that many of the indigenous keywords, pertaining to India, were to be included in the thesaurus. Country specific keywords such as Aadhaar card, Emergency, Tribals, Border Security Force, etc., to mention few out of around 1500 keywords, have been added in the thesaurus constructed under this research. The thesaurus under this research has been successfully integrated with the data input worksheet of OII. The following are various steps involved in assigning subject keywords to a record:

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**Figure - 6: Main Interface of OII**
The OII portal is presently available online at [http://oii.igidr.ac.in/](http://oii.igidr.ac.in/). The design of portal is based on two-tier software architecture in which a presentation layer or interface runs on a client (browser enabled) and a data layer in which the data gets stored on a server. The above figure depicts the presentation layer of the portal in which various menus could be seen. The administrator has created multiple credentials for users who are responsible for keying in the data. Members can use "Members Login" menu to access the administrative interface of the portal.

![Open Index Initiative](image)

![Selection of Database](image)

**Figure -7: Selection of Database**
As shown in the figure 7 above, the data contributor needs to select the database in which he/she is authorized to perform data entry/updation - journal article in this case. On selection of specific data entry service, the user will be asked to login using credentials, generated/provided by the portal administrator. If the credential matches, the system will display welcome message and it will also enable users to create new records in the OII database as shown in the figure 8 below.

![Administrative Interface for Data Contributor](image)

**Figure -8: Administrative Interface for Data Contributor**

One has to select type of operations for which he/she has logged into the system. The authorised data contributor may perform certain operations such as adding new record, modifying existing record, browsing full details of a record and browsing the last 15 records entered by him/her, as shown in the figure 8 above. As soon as user selects type of document for inputting the data, a new blank data input sheet will be displayed as shown in the figure 9 below. One has to fill-up mandatory/required information in the various fields available in the figure 9 below.
One of the important tasks in indexing, is to assign appropriate subject heading(s) based on the content of the document - a journal article in this case. The moment a user clicks on the option ‘Click Here for Thesaurus’ provided in the data input worksheet, the system will open a new window as shown in the figure 10 below. One has to search subject keyword from the thesaurus interface and select an appropriate keyword(s) for the subject elaborated in the journal article.
Figure - 10: Thesaurus Interface

As soon as appropriate descriptor is selected, it will be displayed in the selection area, in the right side of the screen, as shown in the figure 11 below.

Figure - 11: Selection of Appropriate Descriptors
The moment user clicks on ‘Close Window’ option, the value of selected descriptors will automatically be transferred into the keywords field available in the data input worksheet as shown in the figure 12 below. In case of multiple subject keywords, the values will be separated by special character % (percentage) as shown in the figure 12 below.

Figure - 12: Automatic Insertion of Terms into Keywords Field
6.4 Conclusion

The most important aspect of the current research is to develop a thesaurus for Indian social science literature on a relational database management system and to integrate it with the data input worksheet of OII. The thesaurus developed under this research has been integrated with the data input worksheet. This chapter enunciates the process of assigning subject keywords while indexing documents.

References


