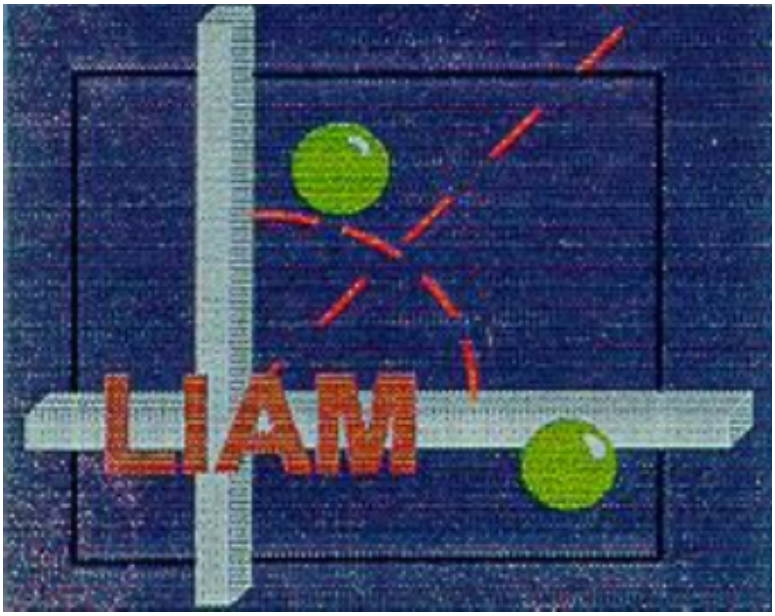
LIAM

The Legal-Institutional Analysis Model for Microsoft Windows™



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Legal-Institutional Analysis Model

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This software has been under development for several years and remains in a Beta test version. First programmed in Fortran, the software has been converted to run in DOS and Windows™ 3.1 and higher formats. The DOS version is available from Berton Lee Lamb. Version 1.5 of LIAM was programmed by Thad Senti of Utah State University and Beta Version 1.0 was revised by Jeff Sandelin, Johnson Controls World Services, Inc.

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INTRODUCTION

Welcome to LIAM for Windows! This software package conducts the Legal-Institutional Analysis Model as described in Wilds (1986). The program is implemented under the Microsoft® Windows™ operating system in order to provide a variety of useful tools that are available in that environment.

This manual briefly describes the features in LIAM. It explains how to install the program on your computer system, and how to start and quit the program. It also includes information about the screens you will see and the appropriate responses needed to navigate the program.

This manual assumes that you are familiar with the basic terminology and procedures for using Microsoft® Windows™ version 3.1 or later. It also assumes that you have set up the Windows™ operating environment on your computer system.

This manual describes how to operate the LIAM software. The software is available from the following web site: http://www.mesc.usgs.gov/seias/seias-products-services.html. For information on how the LIAM can be used in decision analysis and conflict resolution, see Lamb et al. (1998).

Getting Started

Hardware and Software Requirements

To use LIAM for Windows™, your computer must meet the following requirements:

- An IBM-compatible computer with an Intel 386 microprocessor or greater, with a hard drive and a 1.2-MB or greater floppy disk drive.
- 2 MB of RAM. Microsoft Recommends 4-8 MB of RAM for best Windows results.
- A VGA graphics adapter and supporting monitor, preferably with 256-color capability. LIAM is capable of utilizing both 16 and 256 color displays.
- Microsoft® Windows™ version 3.1 or later.
- Microsoft® or IBM® PS/2 compatible mouse.

Installing LIAM

To Run Setup:

1. Insert the LIAM disk into Drive A (or Drive B) or download the software from the following web site: http://www.mesc.usgs.gov/seias/seias-products-services.html to a temporary folder on your hard drive.
2. From the START menu, chose RUN.
3. In the Command line box type **a:setup** (or **b:setup**), or browse to find the setup.exe file on your hard drive if you have downloaded from sthe web site, and then press ENTER (or click OK).
4. Wait for the setup routine to load into memory. When the LIAM Install window appears you will first see an installation information dialog box that you must fill out. You must specify what the destination and source drives are for the installation, as well as optional name and business information.
5. The first field is the source directory. To accept the drive that Install proposes, press TAB.

   -or-

   If you are installing from another source, type the appropriate path in the field, and press TAB.

If Install detects that the source drive and path are invalid, it will tell you so and give you the opportunity to correct the problem.

6. The second field is the directory name to install LIAM. To accept the path that Install proposes, press TAB to go to the next field.

   -or-

If Install detects that the directory in the path already exists, you will be asked to enter a new directory and name. *If you do not, all contents similar to the LIAM program will be overwritten.* If you have an older version of LIAM for Windows™ we suggest you install the new version over it.

7. Install will take about 1 minute to read the diskette. This time will vary depending on your computer configuration.

8. Once all the files have been installed, Install will create an LIAM icon in the LIAM Folder. Drag and drop the LIAM icon to the computer desktop.

9. Installation Complete! You are now ready to run LIAM.

Starting and Quitting LIAM

Starting LIAM

From your desktop, you can start LIAM by double clicking on the LIAM icon. You will be presented with the LIAM splash screen. Click on “Continue” to run the program and on “History” to view a history of the LIAM and a bibliography.

Quitting LIAM

You can stop the LIAM application by clicking on the Windows icon in the upper left corner of your screen and then clicking on “Close” or by clicking on “Project” on the menu bar and then clicking on “Exit.” Both of these actions will take you to the splash screen. Click “Exit” on the splash screen to end the program.

The Main Application Screen

How LIAM Organizes Its Data

Once you have started the LIAM application by double clicking on its icon, you will be presented with the Main Menu window shown in Figure 1.

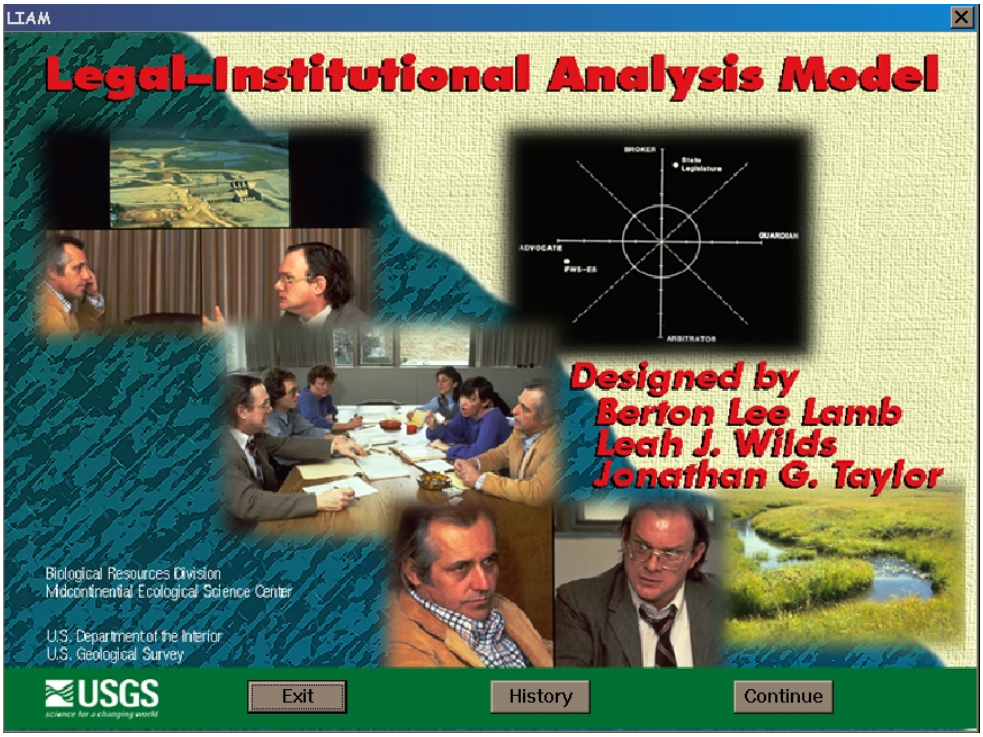


Figure 1. The Main Menu window of LIAM.

LIAM uses four hierarchically organized objects to keep track of its data. These include Project, Respondent, Group, and Plot data objects. These are also the names of the menu items on LIAM's main menu bar (see Figure 2)

Projects are what LIAM uses to encapsulate a respondent, group, and plot objects. Thus, until you open a project, you cannot access other parts of the menu bar (notice Figure 1's menu bar is grayed). Once you have opened a project, LIAM can "see" the menu that the newly opened project contains, and allow you to create, edit, and view the other objects.

Respondent objects represent the individual analyses of various organizations. Each respondent file carries the extension ".rsp," and is created by answering a series of questions. These questions are designed to determine where the respondent lies on a specially designed

coordinate plane. Once plotted, the user can determine if the respondent is a broker, arbitrator, guardian, or advocate, the level of intensity of each of these roles, and other power and role data.

NOTE: Password protection is fully implemented under LIAM for Windows. When password protection has been enabled by the supervisor, you will be requested to enter a password at the beginning of every LIAM session. This password is then saved to any new respondent objects you create, and is used to determine if any previously created respondent objects can be opened by you. If the password you entered at the beginning of the session does not match the password contained in the respondent object you are attempting to open, access will be denied to that object. Please refer to Chapter 6 for a full description of password protection and how it is implemented under LIAM.

Group objects combine respondent objects and carry the extension ".grp." If two or more individuals have created respondent objects for the same organization, a user can place the respondent objects for that organization in a group object so that the final plot depicts the organization as a combined assessment. You are not, however, required to do this, and might even find it advantageous to plot each of the respondent objects for an organization individually to analyze the disparity of roles perceived for that organization.

Plot objects encapsulate group and respondent objects, and carry the extension ".plt." Plot objects are what LIAM uses to create its final graphics output.

Figure 2 is a graphical depiction of the object hierarchy LIAM uses to organize its data:

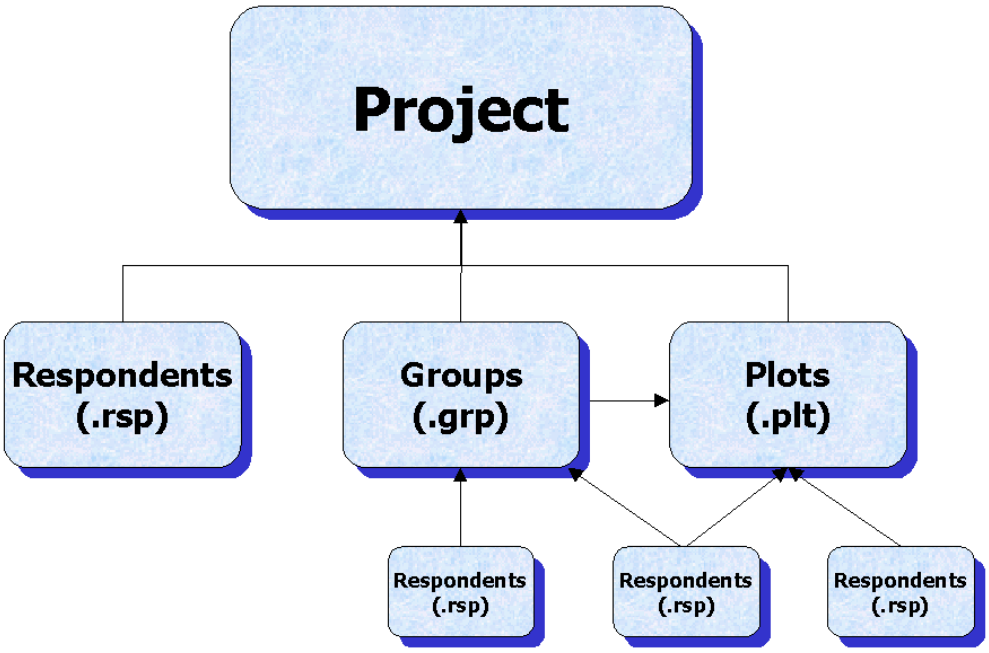
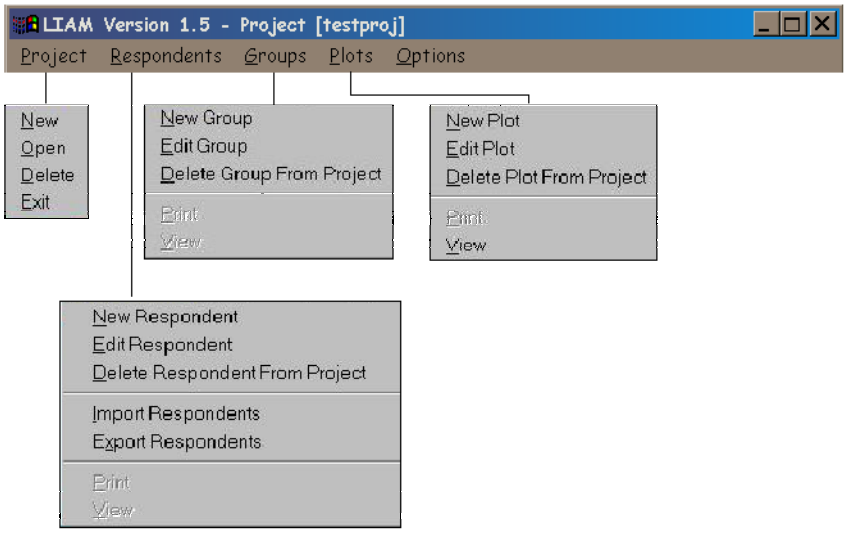


Figure 2. LIAM object hierarchy.

Interface Philosophies and Menu Similarities

Figure 3 is an expanded view of each of the pull down menus under LIAM. You will notice that each of the menus is very much alike. This is to provide the user with a consistent means of moving from one object to the next. Opening, editing, and deleting a respondent object is very much the same as opening, editing, and deleting a group or plot object. The following section explores the similarities among the menu items and provides a brief description of their function.

Figure 3. LIAM Menu breakdown.



To help you decipher which object type you are working with, we have designed picture icons that represent each type of object.

This icon appears when working with Project Objects.

This icon appears when working with Respondent Objects.

This icon appears when working with Group Objects.

This icon appears when working with Plot Objects.

Menu Item: NEW

The NEW menu item creates a new object. Although each of the four menu items shown above has a NEW menu item, how the new object is actually created differs from object to object. For instance, choosing menu item RESPONDENT/NEW RESPONDENT produces the Respondent Editor, whereas choosing GROUP/NEW GROUP produces the Group Manager. In any of the cases, the philosophy is the same--you are creating a new object.

Menu Item: EDIT

The EDIT menu item allows a user to modify an object. Again, the actual modification process may differ from object to object, however, in each case you will be presented with a list of objects to choose from as in Figure 4.

You will notice that the Project menu item has replaced EDIT with OPEN. This is because you actually edit a project by editing its component parts (respondents, groups, etc.) after you open it.

Figure 4. The general look of dialogs produced from choosing the EDIT menu item.

Menu Item: DELETE

The DELETE menu item allows a user to remove objects from a project. In each of the cases the process is the same. You choose from a list of objects the one you wish to remove, confirm your desire to delete, and the object is removed. Be careful when deleting projects! Deleting a project removes all the objects it contains!

Figure 5 shows the DELETE option. Notice the icon has changed to show you that an erase operation is in effect.

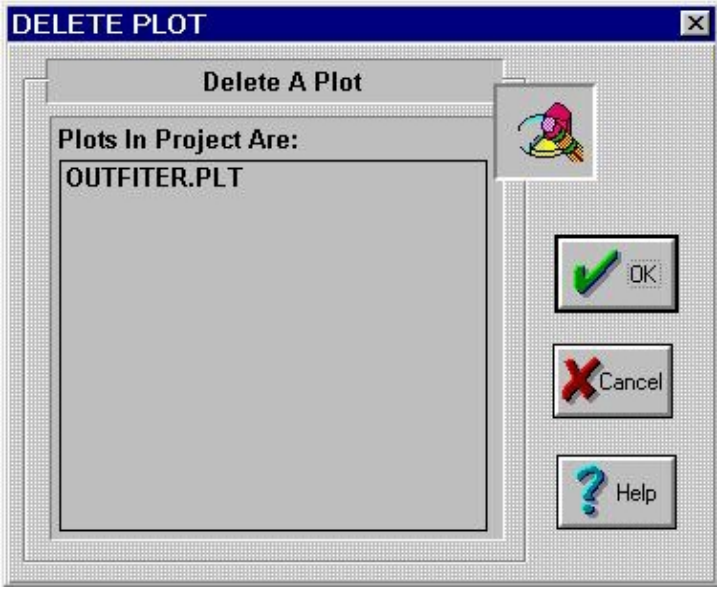


Figure 5. Deleting a plot object.

Menu Item : PRINT

With the Plot displayed on your screen, click the “Print Screen” button on your keyboard. This will add the image to the clipboard. Open Microsoft Word or some other word-processing software to a new document and click “Paste” under the Edit menu to move the image into your document. You can then print the image using the Print commands for your word processor. The image can also be pasted into any imaging software program if you wish to manipulate the image.

Menu Item : VIEW

Only PLOT objects define behavior for the view menu item. A full description of the functionality is written under the section “Plot Menu Specifics - Viewing Plots,” Chapter 5, Page 17.

Project Specifics

Copying Projects with NEW

You can create a new project one of two ways. First, you simply can provide LIAM with a new project name, and an empty project will be created. Or, if you would like to use data and objects from another project, you can create a new project and have LIAM automatically copy the objects from an existing project into the new project. To do this, choose the PROJECT/NEW menu item. You will be presented with the dialog box shown in Figure 6.

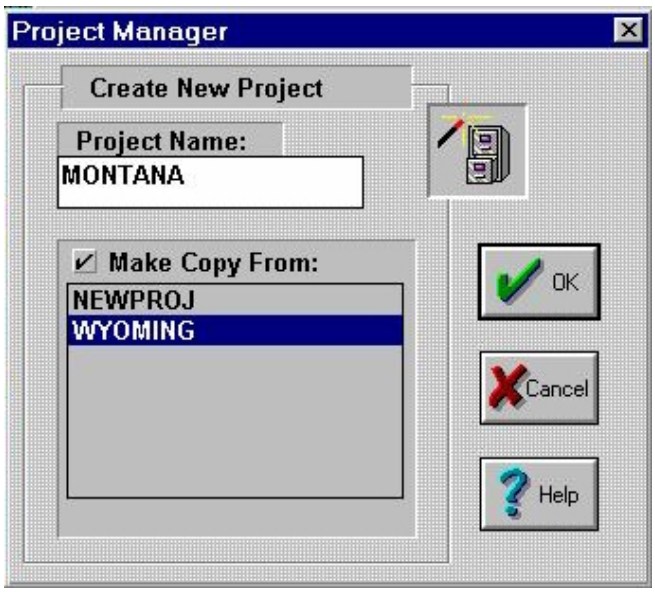


Figure 6. Creating a new project using contents of an existing project.

After you have typed in a new project name, if you wish to create an empty project, simply click OK. Otherwise, if you want to make a copy, click on the “Make Copy From:” check box. Once checked, LIAM lists the other projects available on the disk. Click on the project name you wish to make a copy from and click OK. LIAM will then make a new project using the new project name, and fill it with the objects from the old project.

Respondent Specifics

Using the Respondent Editor

The Respondent Editor is the interface used to ask questions and acquire answers used to evaluate organizations in a negotiation. Below is a brief description of the components found on the Respondent Editor, and their uses.

The Respondent Configuration Screen

The respondent configuration screen (Figure 7) is used to get preliminary information for the respondent file. The information entered here will reappear when you configure your group and plot files.

You must enter a unique name for each respondent object you create. If there are several respondent objects being created for the same organization, we recommend you use a combination of name and a unique number to name the file to avoid overwriting and to allow group merging later. For example, USGS1, USGS2, USGS3, etc. LIAM will warn you, however, if you attempt to overwrite an existing respondent.

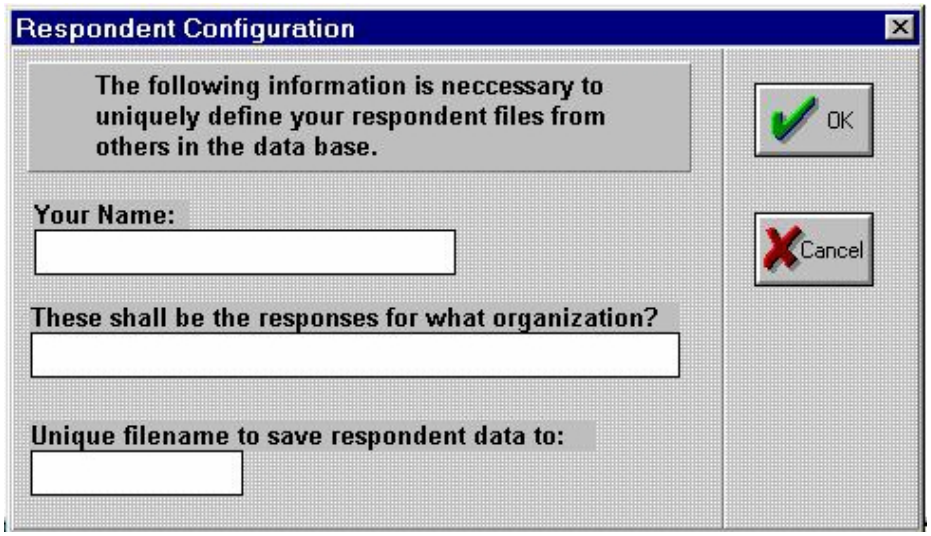


Figure 7. Respondent configuration screen.

Respondent Editor Components

There are several different types of questions posed under the Respondent Editor (Figure 8). Some require essay answers, some number input, and others a simple click of the mouse. If a question has not been answered (as in the case of a new respondent) the answer fields will be empty or unlit. If a question has been previously answered (as in the case of editing an old

respondent) the answer fields will contain text or will be “lit up” to show the answer that was given.

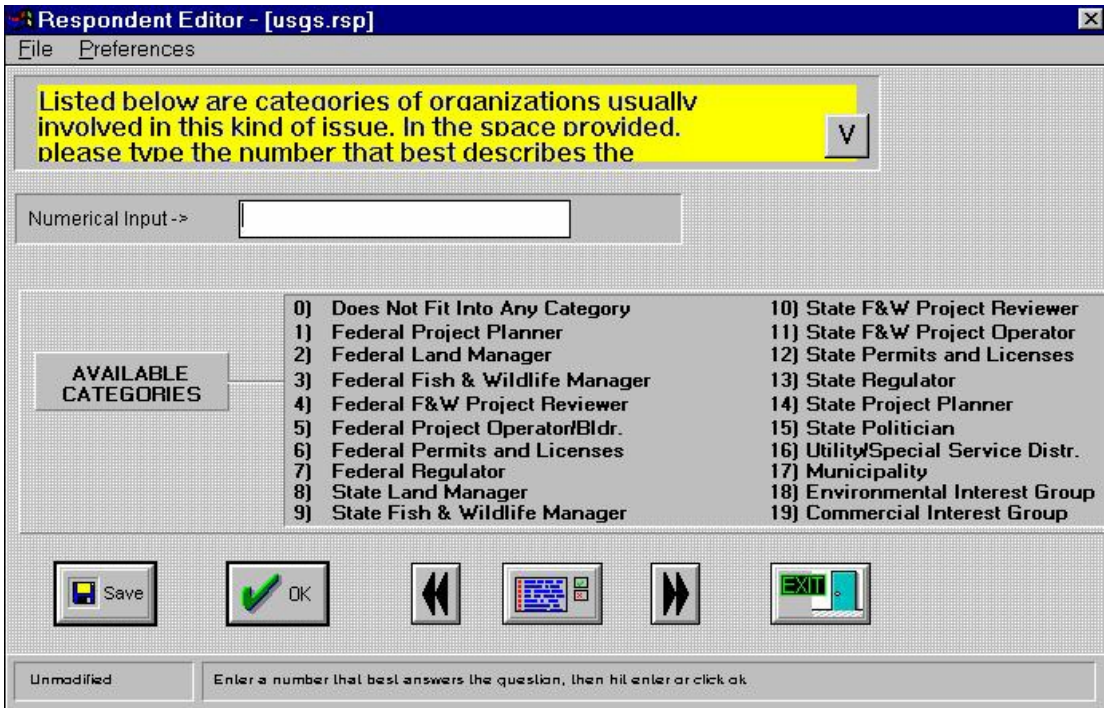


Figure 8. Respondent Editor showing a “rating” type query.

The title bar (reading “Respondent Editor - [usgs.rsp]”) will show the respondent file that is currently being edited.

The scroll buttons and are used to scroll backward and forward one question respectively. By clicking the forward button without answering a question, you are letting LIAM know you are ignoring that question. (*LIAM considers any question that has not been answered as irrelevant, and will not use it when it calculates indexes for plotting).*

The query list button will list all the questions in the order they were (or will be) asked. By double clicking on one of the questions you can “hop” directly to it without having to scroll to it one question at a time.

The save button will automatically save the modifications you have made to the respondent file you named in the configuration screen.

The exit button will quit the editor. If no changes were made, it will immediately return to the main menu, otherwise it will ask if you would like to save your modifications before you exit.

How To Answer Rating Questions

Responses to rating questions appear as a row of five buttons below the questions. Each button represents a level of intensity ranging from “Almost Always” to “Almost Never,” or “Strongly Agree” to “Strongly Disagree,” etc. You answer the question by choosing the intensity that best suits you and clicking on the button.

How To Answer Essay and Text Questions

The essay questions in LIAM are questions that require you to type in a name or several lines of text. Figure 9 is an example of an essay question. To answer an essay question you simply start typing in your answer. You can use the cursor keys, backup and delete keys, and the mouse to move about the text you have typed. When you are finished typing in your answer, click OK or the Forward button. This will save your entry and register it with LIAM.

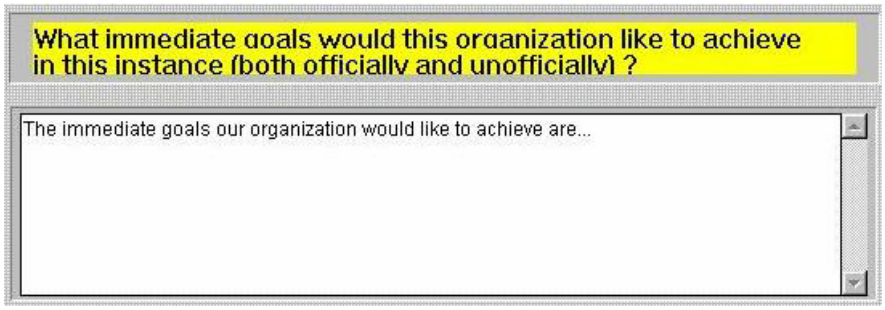


Figure 9. An example essay question.

Changing Colors and Fonts

You can change the background color of the question field to help focus your attention on the question and increase readability.

To change the background color of the question, choose the PREFERENCES/QUESTION/ BACKGROUND COLOR menu item, and select the color you prefer. The color change will remain in effect for the life of the Respondent Editor until changed again.

Importing & Exporting Respondents

It is very likely that you will have LIAM installed on more than one computer to facilitate the creation of respondent objects. Once the respondent objects have been created, it is convenient to bring all these objects under one project on one computer to be analyzed.

Exporting Respondents

You will need to export to a formatted floppy disk following the procedure outlined below.

1. Open the project that contains the respondents you wish to export.

2. Choose the RESPONDENT/EXPORT RESPONDENTS menu item. The following dialog appears (Figure 10):

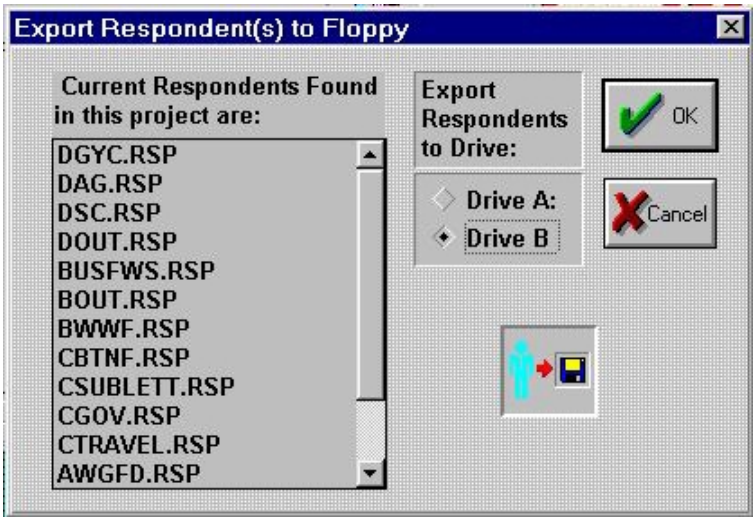


Figure 10. Export Respondents dialog box.

3. Choose the respondent(s) you wish to export by single clicking on them. (You can un-choose by single clicking the item again).
4. Choose the appropriate drive letter that contains the floppy disk.
5. Choose OK.

Once LIAM has finished moving the respondents to the floppy, you can proceed to import them into another project on another computer.

Importing Respondents

1. Open the project to which you wish to import respondents.
2. Place the newly created export disk into floppy drive a: or b:
3. Choose the RESPONDENTS/IMPORT RESPONDENTS menu item. The following dialog box appears (Figure 11):
4. Choose the drive letter of the location of the export floppy. LIAM will read the disk, and display the respondent objects found on the disk in the list box.
5. Choose the respondent(s) you wish to import from the floppy by single clicking on them. (You can un-choose by single clicking the item again).
6. Click the OK button.

LIAM will import the items from the floppy disk to the project that was open.

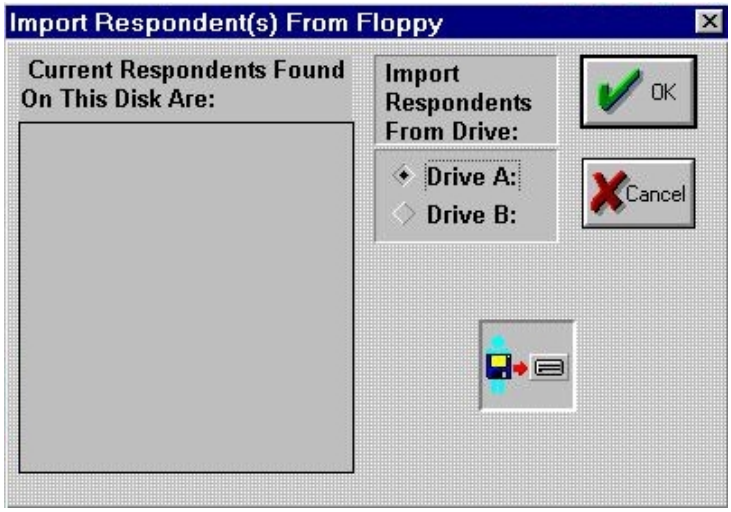


Figure 11. Import Respondents dialog box.

Group & Plot Specifics

Using the Group & Plot Manager

Because the method used to create and modify group and plot objects are so similar, we cover the process used to create them both in one section. The key difference between the two instances is that group objects contain only respondents, where plot objects can contain both groups and respondents. See Figure 2, pg. 5, for a description of how LIAM organizes it data.

To create or modify a group (or plot) you choose GROUP/NEW or GROUP/EDIT from the Group menu (Figure 12). When you do so, the following dialog box appears:

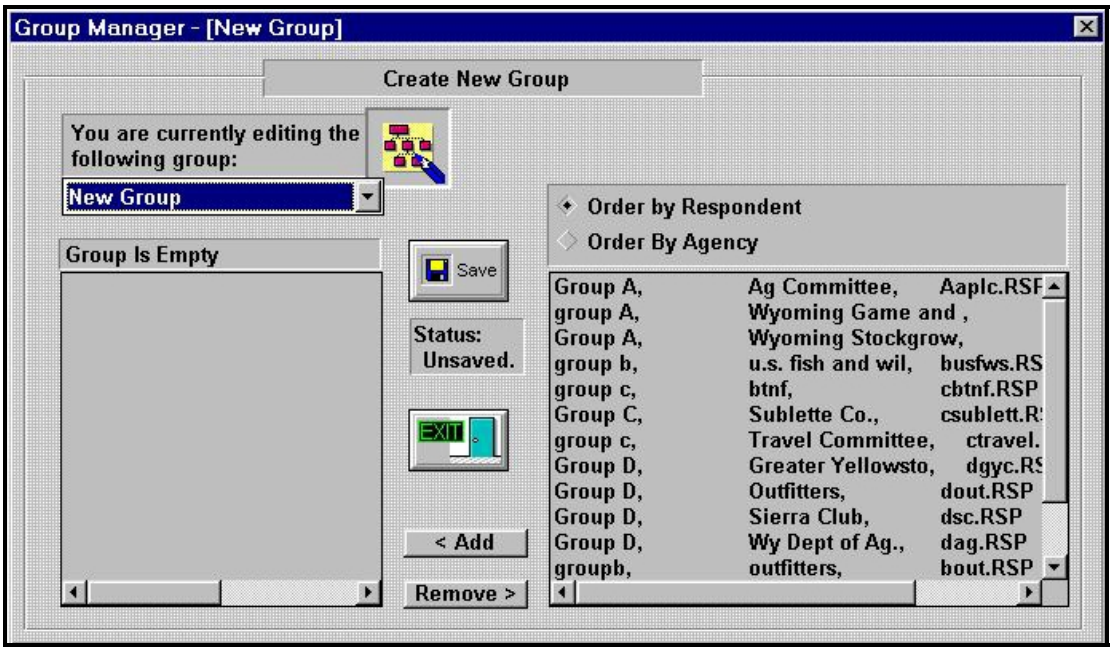


Figure 12. The Group Manager.

When you are editing a new object, the list on the left will be empty, and all headings and title bars will reflect the fact that this is a new object. If you are editing an old object the list on the left will show the objects this group or plot contains, and the headings and title bars will show the name of the group or plot being edited.

In all cases, the list on the right will show the current objects available in the project to add to the group or plot. For the Group Manager, only respondents will be listed. For the Plot Manager, both group and respondents will be listed.

Adding / Removing Objects

You can add an object listed in the right list to the left list by double clicking the item, or single clicking it and clicking the Add button. Notice that once an item is added, double clicking it again has no effect (it is not added twice).

Reversed, the process is the same. You can remove an object in the left list by double clicking it, or single clicking it and clicking the Remove button.

Saving Changes

Once you have completed the creation or modification of the group or plot object, clicking the Save button will save the changes. If the object is new and has no name, you will be requested to name the object.

Creating and Editing Multiple Objects

You can create new objects and edit existing objects without ever leaving the Group or Plot Manager. To do so, simply click on the drop down list box (located in the upper left-hand corner, titled "You are currently editing the following group:" in Figure 12). In it will be a list of the current groups or plots for this project, and a special item named "New Group" or "New Plot."

If you wish to create a new object, click on the "New Group" or "New Plot" item, and you will be given a clean slate to work with.

If you wish to edit an existing group or plot object, click on the name, and the manager will change to reflect the contents of the newly chosen object.

Group Manager Specifics

You will notice in the upper right hand corner of the Group Manager two buttons. These buttons determine how the information in the right hand list will be displayed. The items include the Respondent Name (individual or individuals who created the file), Agency Name (organization analyzed), and the filename of the saved data (respondent object). (These are all taken from the names entered in the Respondent Configuration dialog box.) "Order By Respondents" (the default) orders the items in the right hand list by Respondent Name. "Order By Agency" will order the items in the right-hand list alphabetically by Agency Name.

Plot Manager Specifics

You will notice there is an extra button on the Plot Manager

This button is called the "View" button. It allows you to see immediate graphics output of the plot object you have just created. This is exactly the same as choosing the PLOT/VIEW

menu item, but is provided to save you the trouble of exiting the Plot Manager and then reselecting the plot object you wish to view.

Plot Menu Specifics

Viewing Plots

Once you have created your plot object, the next logical step is to view its contents graphically. This is achieved by choosing the PLOT/VIEW menu item. When you do so a dialog will appear listing all the plot objects currently available for this project. Double clicking an item selects it and tells LIAM you wish to view its contents graphically.

If the plot object contains many respondents, it may take a few seconds to calculate all the vectors, arc, and index files necessary to show the object graphically. During this time, a dialog box will appear showing the status.

Once completed, the object you selected will appear graphically as shown in Figure 13. The actual display will differ, of course, from plot object to plot object.

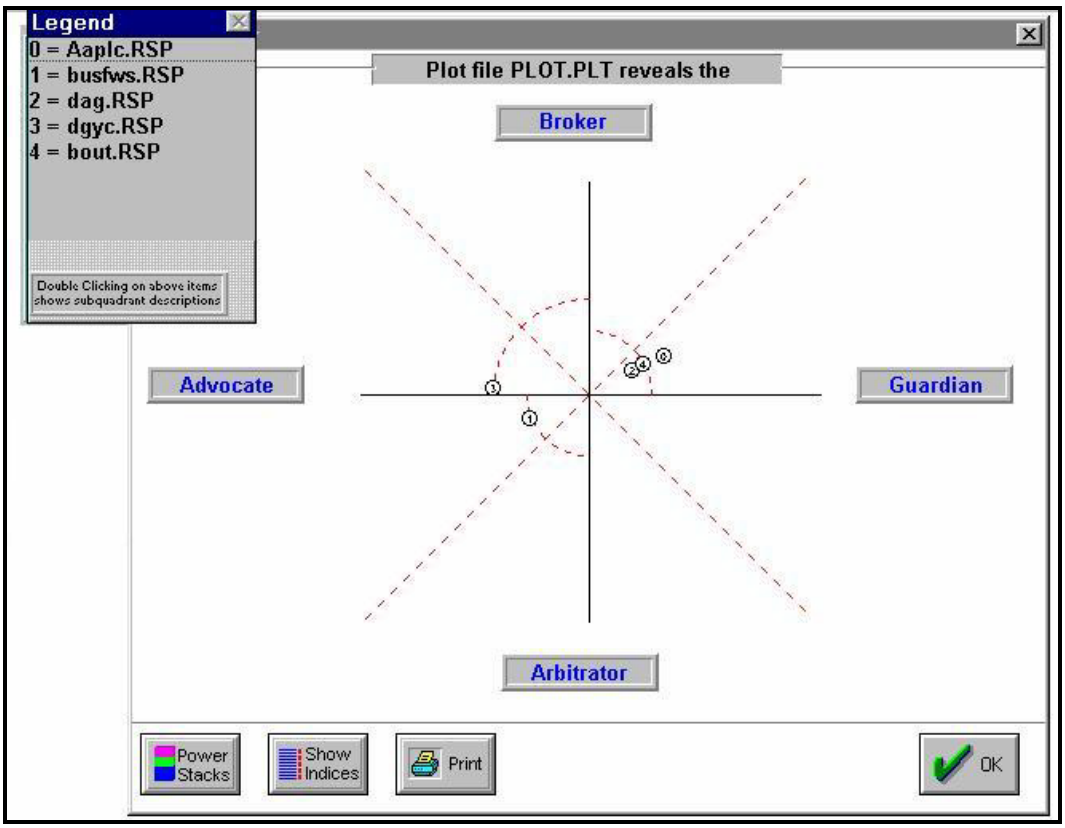


Figure 13. A graphics plot of a plot object.

Each of the points contains a number that corresponds to the group or respondent object it represents. You can correlate the two by perusing the Legend (upper left corner). You may need to scroll the Legend if there are more points than can fit in the dialog box.
For a complete description of the graphs meaning, see Wilds (1986).

Viewing Power Stacks

To view resource, information, and support powers of each of the points, simply click on the Power Stacks button

and the following dialog box will appear (Figure 14).

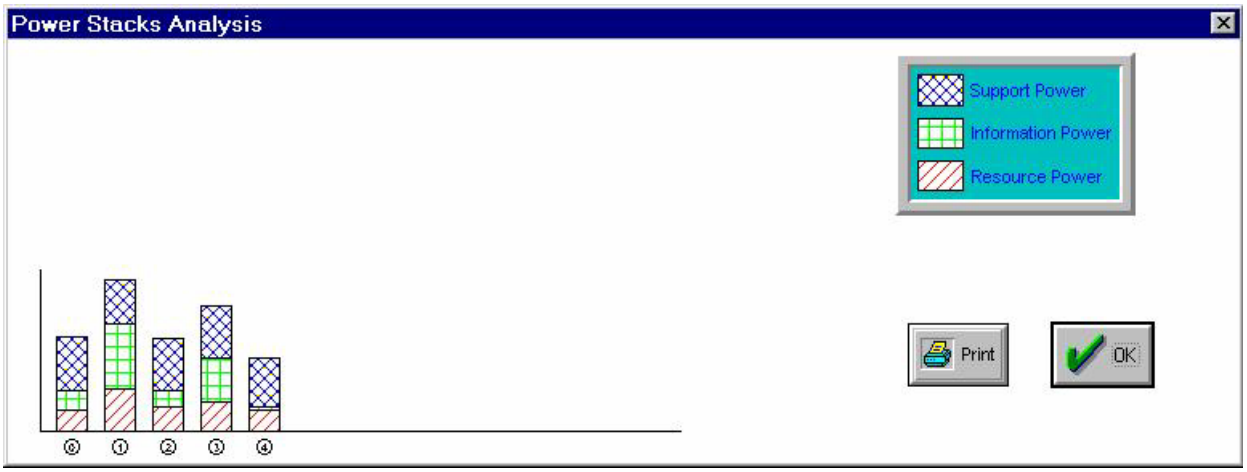


Figure 14. The Power Stacks Analysis dialog box.

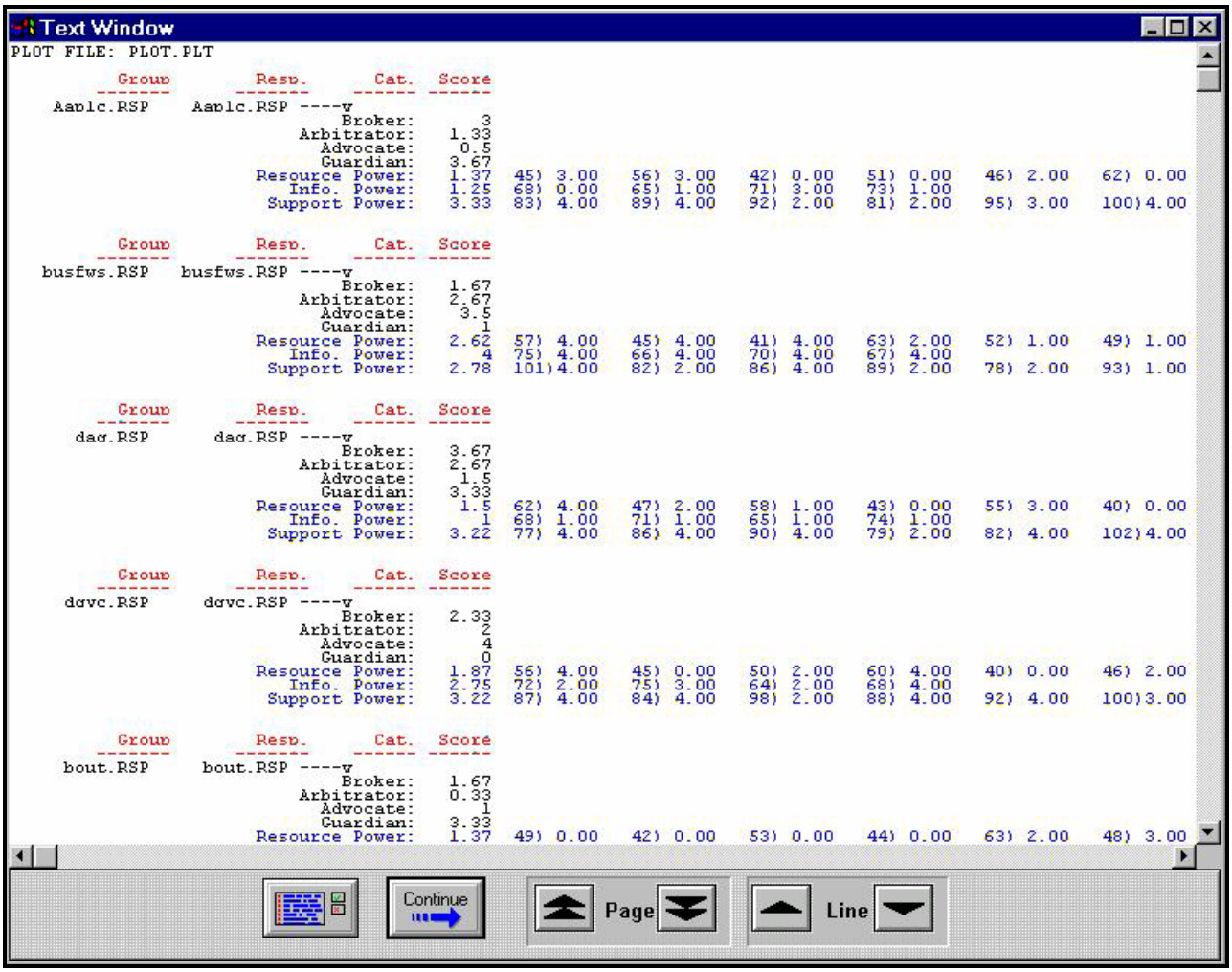
Again, the numbers found along the X axis correspond to the numbers and objects listed in the Legend. The Power Stacks dialog box will adjust the width of the graphs to account for more or fewer objects.

Viewing Indices

When the arcs and vectors are calculated for the graphics display, a text file is created containing the scores for each of the respondents and groups within the plot object. You can view this file by clicking the Show Indices button,

which produces the window shown in Figure 15.

Notice that if a plot object contains respondents, it is considered to be a group with one respondent only, and so does not have a group score. Groups, however, list each of the respondents within the group, as well as the overall group scores for each of the four categories. This will all become evident upon inspection of the listing.



```
Text Window
PLOT FILE: PLOT.PLT

          Group        Resp.      Cat.  Score
        -------      -------    ------ ------
   Aaplc.RSP    Aaplc.RSP ----v
                                Broker:      3
                            Arbitrator:   1.33
                              Advocate:    0.5
                              Guardian:   3.67
                        Resource Power:   1.37  45) 3.00   56) 3.00   42) 0.00   51) 0.00   46) 2.00   62) 0.00
                           Info. Power:   1.25  68) 0.00   65) 1.00   71) 3.00   73) 1.00
                         Support Power:   3.33  83) 4.00   89) 4.00   92) 2.00   81) 2.00   95) 3.00   100)4.00

          Group        Resp.      Cat.  Score
        -------      -------    ------ ------
  busfws.RSP   busfws.RSP ----v
                                Broker:   1.67
                            Arbitrator:   2.67
                              Advocate:    3.5
                              Guardian:      1
                        Resource Power:   2.62  57) 4.00   45) 4.00   41) 4.00   63) 2.00   52) 1.00   49) 1.00
                           Info. Power:      4  75) 4.00   66) 4.00   70) 4.00   67) 4.00
                         Support Power:   2.78  101)4.00   82) 2.00   86) 4.00   89) 2.00   78) 2.00   93) 1.00

          Group        Resp.      Cat.  Score
        -------      -------    ------ ------
     dag.RSP      dag.RSP ----v
                                Broker:   3.67
                            Arbitrator:   2.67
                              Advocate:    1.5
                              Guardian:   3.33
                        Resource Power:    1.5  62) 4.00   47) 2.00   58) 1.00   43) 0.00   55) 3.00   40) 0.00
                           Info. Power:      1  68) 1.00   71) 1.00   65) 1.00   74) 1.00
                         Support Power:   3.22  77) 4.00   86) 4.00   90) 4.00   79) 2.00   82) 4.00   102)4.00

          Group        Resp.      Cat.  Score
        -------      -------    ------ ------
    dgvc.RSP     dgvc.RSP ----v
                                Broker:   2.33
                            Arbitrator:      2
                              Advocate:      4
                              Guardian:      0
                        Resource Power:   1.87  56) 4.00   45) 0.00   50) 2.00   60) 4.00   40) 0.00   46) 2.00
                           Info. Power:   2.75  72) 2.00   75) 3.00   64) 2.00   68) 4.00
                         Support Power:   3.22  87) 4.00   84) 4.00   98) 2.00   88) 4.00   92) 4.00   100)3.00

          Group        Resp.      Cat.  Score
        -------      -------    ------ ------
    bout.RSP     bout.RSP ----v
                                Broker:   1.67
                            Arbitrator:   0.33
                              Advocate:      1
                              Guardian:   3.33
                        Resource Power:   1.37  49) 0.00   42) 0.00   53) 0.00   44) 0.00   63) 2.00   48) 3.00
```

Continue Page Line

Figure 15. Window listing the scores of each of the categories.

Viewing Sub-quadrant Paragraphs

Each of the points plotted has with it a short paragraph describing the predicted role of that organization. To view this paragraph, you must double click the respondent or group listed in the Legend dialog box (upper left in Figure 13). This will reveal the paragraph for that role (Figure 16). For more information on the roles in LIAM, see Beckett and Lamb (1976) and Lamb (1980).

Printing {Plots

With the Plot displayed on your screen, click the “Print Screen” button on your keyboard. This will add the image to the clipboard. Open Microsoft Word or some other word-processing software to a new document and click “Paste” under the Edit menu to move the image into your document. You can then print the image using the Print commands for your word processor. The image can also be pasted into any imaging software program if you wish to manipulate the image.

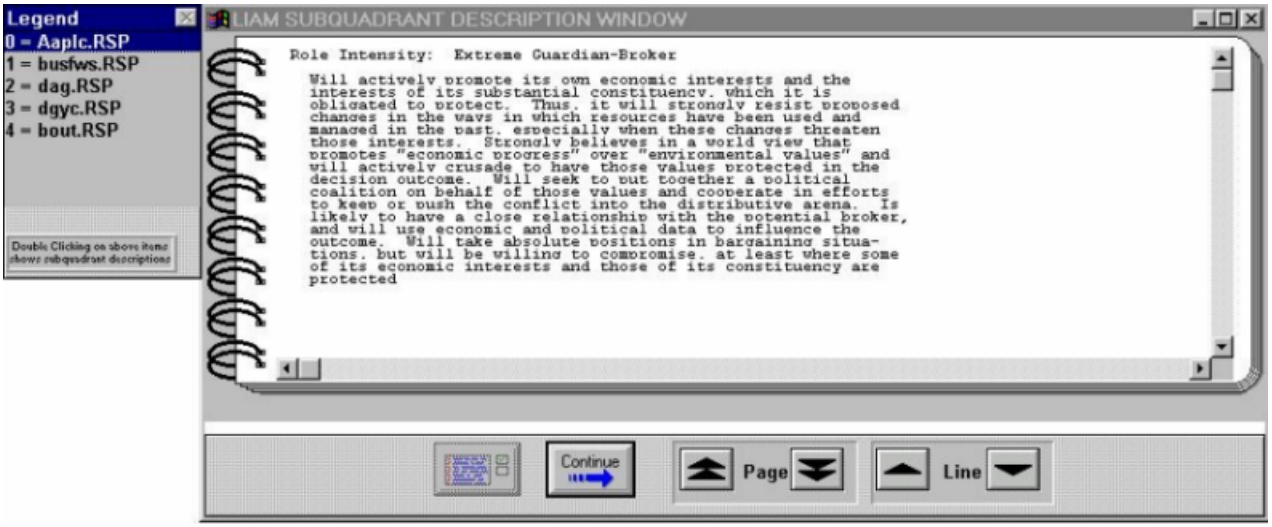


Figure 16. Descriptions revealed when double clicking Legend items.

Conducting a Strength-Needs Analysis

Once respondents have been plotted it is possible to review the answers to the “power” questions to determine which elements believed to constitute the strengths or needs of each organization. To do this click on the “Show Indices” button. That will bring up a screen containing all the response by question number. By referring to the questions listed under “Power Measures in the LIAM” below, you can evaluate which elements constitute an organization’s power. For example, question 43 assesses the degree to which an organization has statutory control of the affected resource.

Power scores in LIAM range from 0-4 with 4 meaning a lot of power and 0 meaning no power. In the exercises we run for agencies, we usually adopt the convention that any score of 3 or higher constitutes power and any score of 1 or lower indicates weakness (or need). When there are multiple respondents for an organization we average all the scores for a particular question and follow these criteria: 0-1.5 means “need;” 1.6-2.4 means “neutral;” and 2.5-4.0 means “strength.” On the occasion when respondent scores include an outlier (for example the scores might be 1, 1, and 4 for an mean of 2), we would report the mean but ask workshop participants to discuss why one team of respondents differed so markedly from the others.

Our measures of power are based on work of Rourke, Seidman, and Wildavsky. We have written about this in Burkardt et al. (1997).

Power Measures in the LIAM

Resource Power

Question 40-42 Physical control of the resource (This includes: "Physical Regulation" [for example, uses law enforcement personnel to compel compliance] and "Land Ownership"--see Lamb and Doerksen 1978, pp. 45-46, 47 and Lamb 1977, p. 4 "an agency gains influence to the extent that others must request action from it").

Question 43-45 Statutory control of the resource (see Lamb and Doerksen 1978, pp. 42-45)

Question 46-48 Support from general public (see Lamb and Doerksen 1978, p.48)

Question 49-51 Personnel resources (see Lamb and Doerksen 1978, p.48, "Agency Resources")

Question 52-54 Monetary resources (funding) (see Lamb and Doerksen 1978, p.48, "Agency Resources")

Question 55-57 Active in these types of issues (see Lamb and Doerksen 1978, pp. 43-45 "Frequency of Involvement")

Question 58-60 Central to mission (see Lamb and Doerksen 1978, p.46, 49 "Intensity of Interest")

Question 61-63 Values similar to political leadership (see Benveniste, 1972, pp. 120-123 "Access to the Powerful")

Information Power (See Lamb and Doerksen 1978, pp. 47-48)

Question 64-66 Technical information is easily understood

Question 67-69 Experienced in collecting and distributing data

Question 70-72 Has technical knowledge

Question 73-75 Expertise is recognized (see Benveniste, 1972, pp. 123-125 "Political Value of Information")

Support Power or Constituency Support

These measures refer to the power of support groups. The questions are answered in the context of a list of organizations that support the organization that is being analyzed. Respondents are asked whether the support groups are large, attentive, experienced, and so on. For example, questions 76-78 ask how cohesive are the supporters of the organization being analyzed. The indicators of support group power are drawn from Lamb and Doerksen (1978, p.48).

Question 76-78 Cohesiveness

Question 79-81 Large membership

Question 82-84 Intense interest in the issue

Question 85-87 A record of activity in the issue

Question 88-90 A record of being well coordinated

Question 91-93 The support of the general public

Question 94-96 Experience in politics

Question 97-99 Prestige and respect

Question 100-102 A record of awareness of the issue

Conducting a Role Analysis

Conducting a “role analysis” using the LIAM should be possible within the program without reference to additional information. However, sometimes it is helpful to know which questions

were intended to measure particular indicators of role. The questions for each indicator of role are listed below.

Catalog of Questions for LIAM Roles

Questions	Measure
Broker Role	
1,2,3	Preference for negotiation
4,5,6	Attention to political considerations
7,8,9	Distribution of benefits
Arbitrator Role	
10,11,12	Preference for formal processes
13,14,15	Preference for objective supporting, technical information
16,17,18	Preference for parties to *demonstrate* a need
Advocate Role	
19,20.21	Preference for change in traditional behaviors
22,23,24	Preference for preservation of natural resources
25,26,27	Usually reacts to proposals by others
28,29,30	Emphasizes the value of nature
Guardian Role	
31,32,33	Preference for economic approach
34,35,36	Preference for private ownership and traditional decisionmaking
37,38,39	Prefers market as model for decisionmaking
40,41,42	Directs the use of resources, manages land, or has physical control

Options Menu

Password Protection

When you install LIAM for Windows, the password protection is off by default. To change the state of the password protection, you must choose the OPTIONS/PASSWORD PROTECTION menu item. When you do so, the following dialog appears (Figure 17):

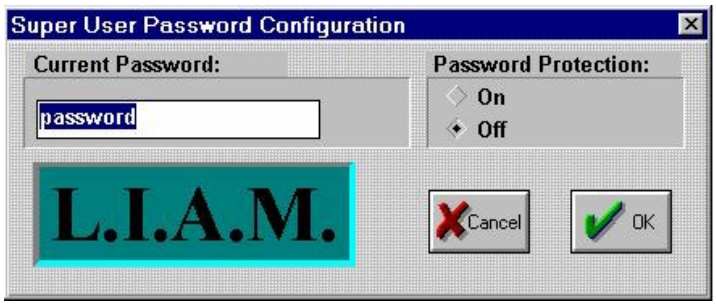


Figure 17. Password configuration.

To ensure a secure system, once password protection is turned on, only the super user can turn the password protection back to the "off" state. Super user status is accomplished by entering the password shown in Figure 17. Note that the password in Figure 17 can be changed so that the super user has the ability to periodically update the password necessary to turn off password protection.

LIAM Password Protection Breakdown

- If password protection is not on, everyone has access to the OPTIONS/PASSWORD menu item.
- Once password protection is on, you must type in the super-user password to turn password protection back off. The super-user password can be modified in the dialog shown in Figure 17.
- Once you have clicked the "On" radio button for password protection, you must close and restart the system for the protection to take effect. This is so a password can be retrieved from the user by LIAM.
- If password protection is not on, and respondent files are created, these files will still be accessible by everyone even after password protection is turned on. This is because no password was entered at the beginning of the nonprotected system, and thus no password could be stored with the respondent file.
- Password protection is case sensitive. "FOO" is not the same as "foo" or "Foo" or "FoO", etc.

- Users are allowed to maintain as many different passwords as they like, but for any one session only one of those passwords is in effect, and so only the respondent files they created while using that password will be accessible.

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