HELP FILE: LOOK AT ASSOCIATIONS

A. Data on Social Associations

1. Overview

(a) Non-kin social associations

Non-kin social associations are a key component of the biographical information in CBDB. The types of association include friendship, teacher-student, client-patron and many other forms of connections between individuals or between individuals and larger groups (like being listed in a factional clique or as part of a cohort of examinees who attained the *jinshi* degree in a particular year).

While the basic structure of the data is simple (person + association + associate), a major challenge in recording the non-kinship **Associations** that individuals formed over their lives has been to control the proliferation of the categories of association. These categories of association derive from the texts that provide the biographical information, but in many cases CBDB cannot simply use the actual phrasing in the text—which would lead to an explosion of very particular categories—and, instead, the editor must make the judgment to treat the association as an instance of a more general category. Using this approach, CBDB at present has 462 categories of association, divided into 10 broad clusters with 35 subcluster.

(b) Dyadic and Triadic Associations

Because associations are between pairs of people (however, see below), there must be symmetrical types of associations. That is, if {**A** "is the student of" **B**} is in the database, then {**B** "is the teacher of" **A**} also should be so. In fact, the current version of the program automatically generates this second entry. Thus Associations as an entity has an internal structure:

> Association type
> Paired Association type
> Association Categories/subcategories (3 levels at present)

When one creates a new category of **Association**, one must also create its converse. Mutual associations, of course, are their own converse: {**A** "is friend of" **B**} is the same as {**B** "is friend of" **A**}. Here the roles of **A** and **B** are **reciprocal**. In most associations, however, the two people play distinct roles in which one person plays an **active** role in creating the association and the other a more passive role, and CBDB needs the converse category to capture the roles of the two people from their different perspectives: to record for **A** that {**A** "followed" **B**} also means that for **B**, {**B** "*was* followed *by*" **A**}. Some associations are not dyadic because the relation is not to a person but to a more abstract or general object. The most

important type of association of this type is the faction. Thus we have {**A** "is member of the purged Yuanyou group" ∅} (∅ here is the *Null* (Empty) element.) A few rare relations are **triadic**: {**A** "ordered" **B** "to execute" **C**}. CBDB has added a third field to capture such situations but does not yet process such triadic relations in its analytic routines because such relations, called *hypergraphs* in the social network analysis literature, cannot be processed by many SNA programs.

(c) Mediated Associations

In some important cases, associations form through the *mediation* of people or of institutions like local academies or temples. CBDB captures these types of relations by adding additional data to associations. For example, we might know of a relation between X and Y because X wrote a biography for Y's mother's tomb. We may not know if Y directly asked X to write the inscription, but the fact that the mother plays a role in creating the relationship should be recorded.

2. Structure of an Association Record

Because associations in pre-modern Chinese society often are complex, the table tracking associations in CBDB uses a correspondingly large number of fields:

(a) Basic Information

1. Person
2. Associated person
3. The association: the association is *directed*. That is, if A wrote to B, A is the **active** party. Here, A took the action, while B may have never received the letter, may not have welcomed it, or may not have even noticed it. In some cases, lie friendship, associations are **reciprocal** and *bidirectional*. In its reporting, CBDB selects the **active** member of the pair of records that record the associations.
4. The number of objects or events establishing the association (If X wrote 15 letters to Y all with the same title, for example, CBDB has just one record for those 15 letters.)

(b) Information about Kinship and Other Relations that played a role in the Association

5. The *kinship relation*, if the association was established through a relative of the person
6. The *person* whose kinship relation established the association
7. The kinship relation, if the association was established through a *relative of the associated person*
8. The *kin of the associate* through whom the association was established
9. The name of the person who *claimed the existence* of the association: for example, a son claiming it for his father

(c) Time and Place of the Association

> 10. The *place* of the association
> 11. The *sequence* of an association, if one does not know the actual date
> 12. The *date* of the association (year, month, and day, if known)

(d) Contextual Information

> 13. The *social institution* at or through which the association was established
> 14. The *occasion* on which the association was established
> 15. The *genre* of the writing that establishes the association, if relevant
> 16. The *title* of the work that established the association, if relevant
> 17. The *scholarly topic* around which the association was formed

(e) Source and Notes

> 18. Source
> 19. Note

B. The Interface

1. *Select Association* Command Button

LookAtAssociations allows one to look at the people who have participated in particular associations or categories of associations. After opening the form, one clicks

on **Select Association** to choose the type of association one wants to investigate. There are over four hundred categories of associations, so CBDB allows one to pick by type and subtype.
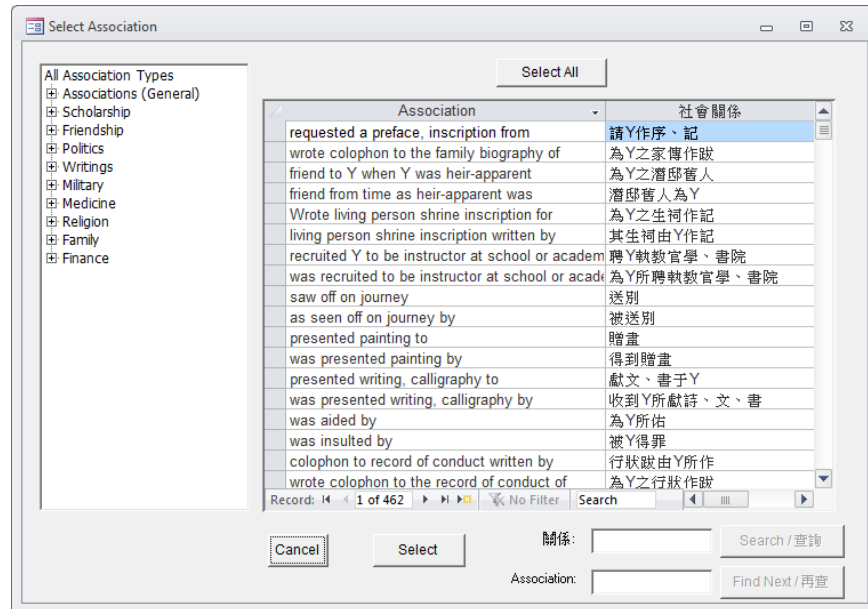

Consider the military associations. Under "Scholarship" there are seven subtypes. The "Intellectual Affiliations" subtype in turn has 30 categories of associations:
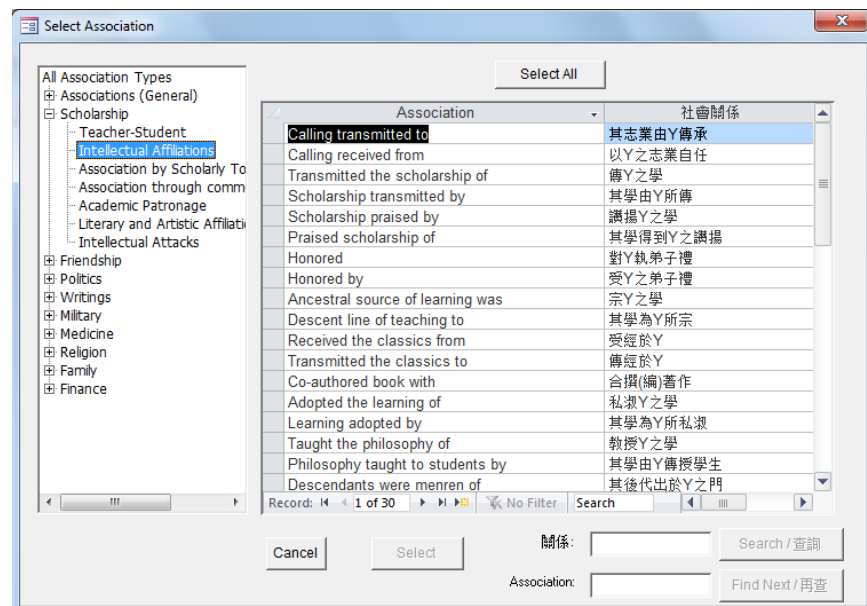

Note that, as with entry, one can search for terms in the table of associations in both English and Chinese and search again if the first item found is not what you are looking for. Note that in searching for "classics," CBDB finds strings in which the term

appears in the middle of the string as well as at the beginning. If the first entry with "classics" is not what one is seeking, one can click on **Find Next** to scroll through all relevant associations.
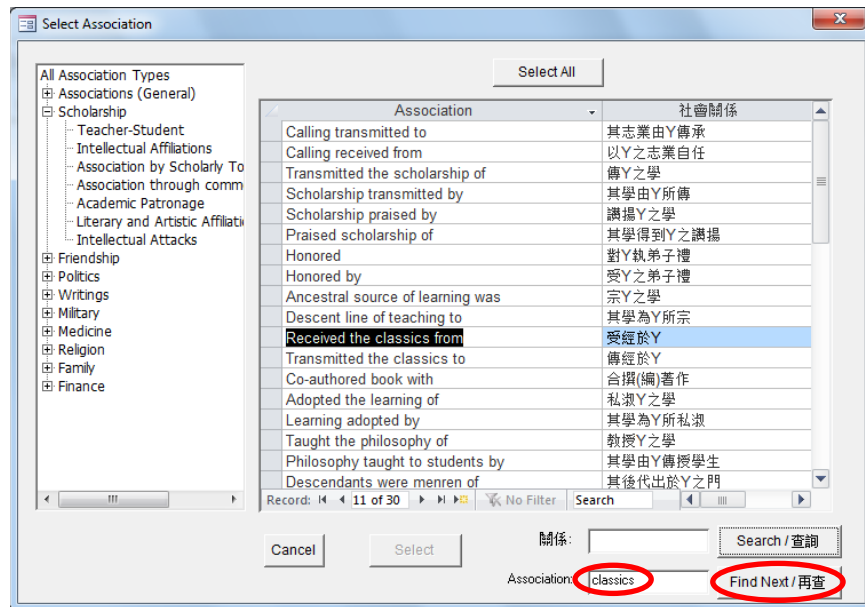
If one wants to select all the associations that are part of the subcategory "Intellectual Affiliations," one clicks on **Select All** and then on **Select** to exit the selection form. If one wants to unselect the associations, simply click on **De-Select All** and make a new selection.
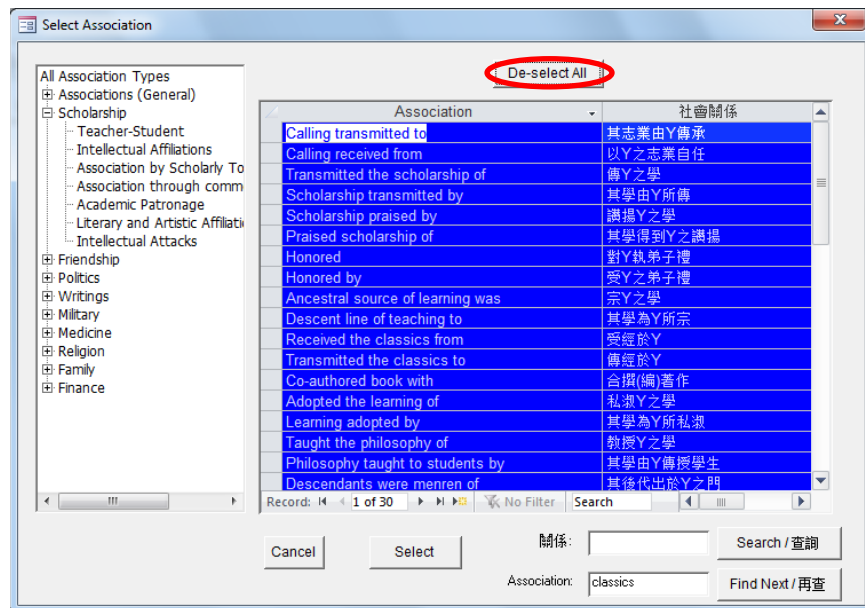
2. *Selected Association and Association Type* Text Box

In the following screen, I have selected *all associations of Intellectual Affiliation*. When one chooses all the associations in a type or subtype, the Association text box has "[All]"

If, however, the user selects a specific association like "received classics from," then that association (in both English and Chinese) appears in the **Association** text box, while "N/A," for "Not Applicable," appears in the **Association Type** text box:

3. *From and To Years* Text Boxes

Once the user has selected the association(s) to be explored, user then must decide whether to limit the search by the index year of the **active** member in the association. CBDB uses the index year of the active member because, although dates are a part of the ASSOC_DATA table, CBDB does not have date information for most associations. Thus, as a second-best alternative, **LookAtAssociations** uses the *index year* of the individuals to see whether they fall within the specified beginning and end dates the **From** an **To** text boxes.

4. *Use Index Year* Check Box

Using the index year of people introduces a significant limitation at the same time that it allows one to focus on specific timeframes: people for whom CBDB does not have an index year simply disappear from the results. Thus CBDB allows one to search without using the index years by clicking on the **Use Index Years** check box directly below the input boxes for years. For example, if one looks at all "intellectual affiliation" associations between 800 and 1400, one gets 330 results:

However, if one removes the constraint, one gets significantly more associations because of the additional records for people with no index years. Note that in some of these records, one of the two people participating in the association *does* have an index year. (The association does not guarantee that the two people are contemporaries, since a later (undated) person can, for example, declare intellectual allegiance to a famous earlier figure.
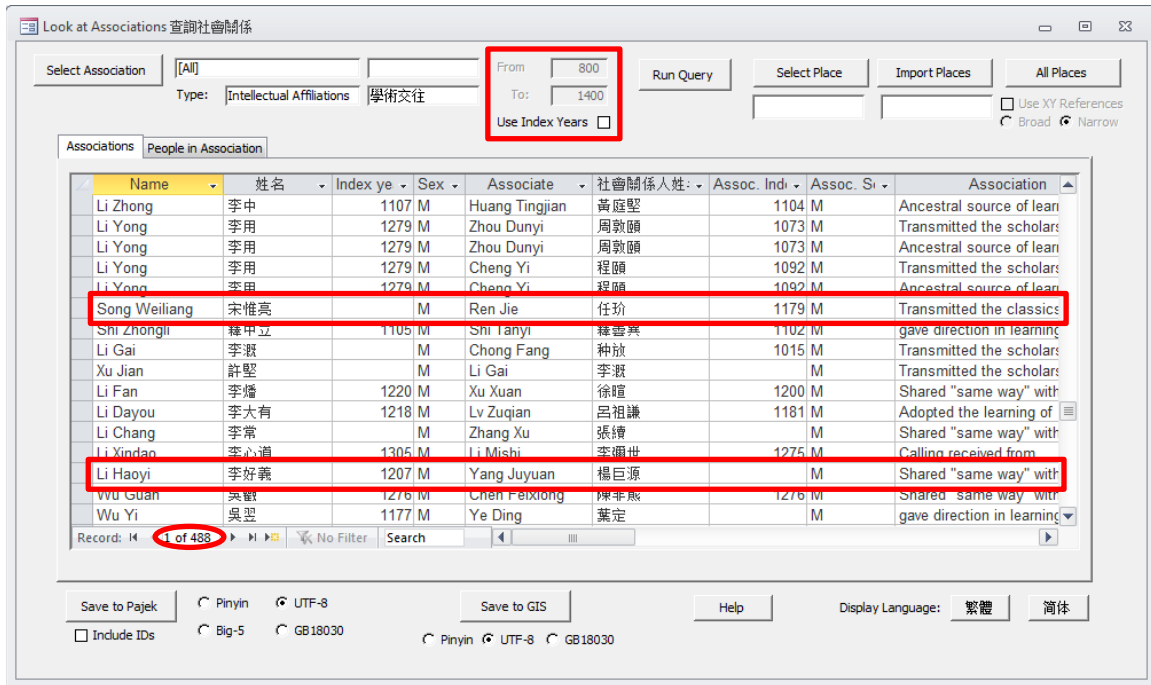
5. **Run Query** *Command Button*

The **Run Query** button initially is disabled (i.e. grey), but it becomes active as soon as one has selected an association to explore. One clicks the **Run Query** command button to run the search with the parameters one has set.

6. **Select Place** *Command Button*

CBDB allows the user to limit the search for associations by place. Here the *place* is not the place of the association, about which CBDB has only limited information, but the place with which the individuals in CBDB are associated. The linking of people to place that CBDB uses is a set of relationships in descending order of importance:

        (1) the person's index-place (籍貫),
        (2) Actual Residence,
        (3) Last Known Address,
        (4) Moved to,
        (5) Eight Banner address (Qing dynasty),
        (6) Alternate basic affiliation.

The "places" to which CBDB links individuals are administrative units, but CBDB assigns new codes to units depending on two criteria:

        (1) Did the size of the unit change? (This is more important for prefectures
           which frequently gained or lost subordinate counties.)
        (2) Did the name change?

In fact, shifts in name and size are frequent enough that CBDB often has many different codes to refer to a single "place."

Consider Kaifeng. when one clicks on the **Select Place** button, opens the *Select Address* form, and searches for Kaifeng, there are 18 distinct codes for Kaifeng from 712 to 2005.

Name	地名	Fir	Last Yea	Belongs to	Belongs to I	Belongs to	Belongs	Belongs	Address]
Kaide Fu	開德府	1106	1109	京畿路	宋朝				11124
Kaide Fu	開德府	1110	1113	河北東路	宋朝				11571
Kaide Fu	開德府	1114	1119	京畿路	宋朝				11125
Kaide Fu	開德府	1120	1126	河北東路	宋朝				11572
Kaifeng	開封	960	1052	開封府	宋朝				100658
Kaifeng	開封	1949	2005	開封市	河南省	中華人民共和國			749
Kaifeng	開封	1127	1234	開封府	南京路	金朝			3079
Kaifeng	開封	960	1052	開封府	宋朝				10991
Kaifeng	開封	1053	1119	開封府	京畿路	宋朝			11028
Kaifeng	開封	1235	1367	汴梁路	河南行中書省	元朝			17447
Kaifeng	開封	712	907	汴州	河南道	唐朝			14748
Kaifeng	開封	1912	1949	河南省	中華民國				10036
Kaifeng	開封	1120	1126						10992
Kaifeng Bingbeidao	開封兵備道	1368	1643	河南諸道	明朝				303067
Kaifeng Fu	開封府	1127	1234	南京路	金朝				3078
Kaifeng Fu	開封府	1368	1643	河南布政司	明朝				5028
Kaifeng Fu	開封府	1430	1643	河南布政司	河南巡撫	明朝			5028
Kaifeng Fu	開封府	1053	1119	京畿路	宋朝				11027
Kaifeng Fu	開封府	1644	1911	河南省	清朝				8074
Kaifeng Fu	開封府	960	1052	宋朝					10990
Kaifeng Shi	開封市	1949	2005	河南省					169
Kaifeng Shixiaqu	開封市轄區	1949	2005	開封市	河南省	中華人民共和國			748
Kaiguang	開光	725	907	銀州	關內道	唐朝			14660

Record: 9759 of 25962   No Filter   Search

Cancel   Select   Select ALL Filtered   地名: ____   Place Name: Kaifeng   Search / 查詢   地名: ____   Place Name: ____   Filter   Clear Filter

If one wishes to explore Kaifeng broadly, one can enter "Kaifeng" into the Filter "Place Name" box (or 開封 into 地名) and then click the **Filter** command button. This gives a list of all places that begin with the word "Kaifeng." (Using the Chinese, here 開封, is better to avoid the possibility of homonyms.) Then click the **Select ALL Filtered** command button:

Name	地名	Fir	Last Yea	Belongs to	Belongs to I	Belongs to	Belongs	Belongs	Address]
Kaifeng Shi	開封市	1949	2005	河南省	中華人民共和國				169
Kaifeng Shixiaqu	開封市轄區	1949	2005	開封市	河南省	中華人民共和國			748
Kaifeng	開封	1949	2005	開封市	河南省	中華人民共和國			749
Kaifeng Fu	開封府	1127	1234	南京路	金朝				3078
Kaifeng	開封	1127	1234	開封府	南京路	金朝			3079
Kaifeng Fu	開封府	1368	1643	河南布政司	明朝				5028
Kaifeng Fu	開封府	1430	1643	河南布政司	河南巡撫	明朝			5028
Kaifeng Fu	開封府	1644	1911	河南省	清朝				8074
Kaifeng	開封	1912	1949	河南省	中華民國				10036
Kaifeng Fu	開封府	960	1052	宋朝					10990
Kaifeng	開封	960	1052	開封府	宋朝				10991
Kaifeng	開封	1120	1126						10992
Kaifeng Fu	開封府	1053	1119	京畿路	宋朝				11027
Kaifeng	開封	1053	1119	開封府	京畿路	宋朝			11028
Kaifeng	開封	712	907	汴州	河南道	唐朝			14748
Kaifeng	開封	1235	1367	汴梁路	河南行中書省	元朝			17447
Kaifeng	開封	960	1052	開封府	宋朝				100658
Kaifeng Bingbeidao	開封兵備道	1368	1643	河南諸道	明朝				303067

Record: 1 of 18   No Filter   Search

Cancel   Select   Select ALL Filtered   地名: ____   Place Name: Kaifeng   Search / 查詢   地名: ____   Place Name: Kaifeng   Filter   Clear Filter

This will return you to the main LookAtAssociations form, with all the Kaifeng codes selected:


The double square brackets around "[[Kaifeng]]" and "[[Filter]]" make clear that the list derives from a filter on address codes for the term "Kaifeng." When one clicks on **Run Query**, CBDB locates all the subordinate units under the selected "place(s)" to include in the search. In this case, the search produces 18 records for association.

7. *Import Places* Command Button

If you wish to limit the number of codes for Kaifeng even further, you can select all the filtered records in the **Select Address** form, paste the records into a new **text file**, delete the records you do not want, and *move the Address IDs to the first item* on each remaining line. When CBDB reads the list, it looks for just those initial numbers and ignores everything else:

Now click on the **Import Places** button in the LookAtAssociations form, select the file (CBDB gives a warning when it reads the list of IDs and finds an invalid ID). The text boxes name the selected place shows "[Imported List]."
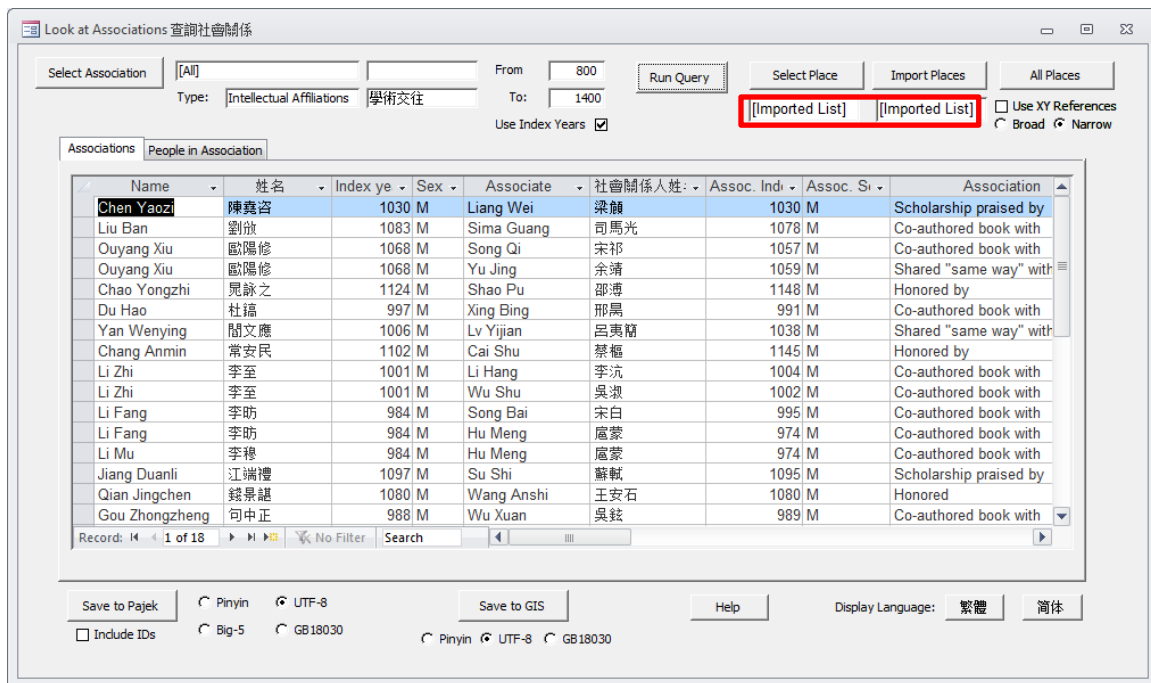
When one then runs the query, the results, in this case happen to be the same as before.

8. *All Places* Command Button

If one wishes to remove the constraint of selecting by place, one simply clicks on the **All Places** command button.

9. *Use XY References* **Checkbox**

The history of administrative units in China is very complex. Units change names and sizes, and each time they do, CBDB assigns a new address ID. The user cannot be expected to be fully aware of the history of each administrative unit. Therefore CBDB provides one additional option in searching by place, called **Use XY References**.

In CBDB, each administrative unit like a prefecture or a county is assigned a pair of longitude-latitude reference coordinates. In some cases at present, these coordinates are for the centroid of the polyhedron that defines the boundaries of the unit. But because CBDB is shifting away from relying on such polyhedrons (because in many instances we do not have accurate enough data), in many other cases, CBDB uses the reference coordinates of the city that is the administrative center for the unit.

CBDB gives the user two choices when searching by longitude and latitude. In a **Narrow** search, all units whose coordinates are within 0.03 degrees in longitude and latitude (which corresponds to a bit more than two kilometers) from the selected units also will be included in the search. For a **Broad** search, the range increases from 0.03 to 0.06. It may prove that broad and narrow search produce identical results, but this is an empirical question awaiting user feedback. Thus one can specify a Tang dynasty code for Kaifeng county (ID 14748), for example, and search for people throughout the rest of Chinese history:
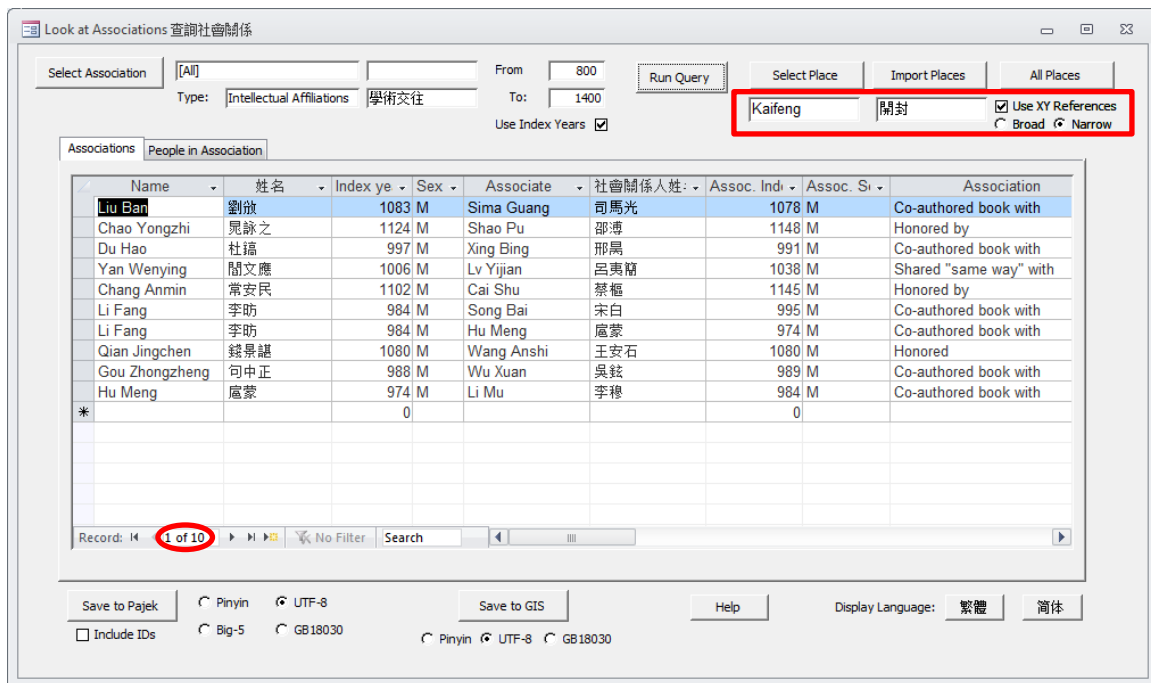
Although the results are just 10 records, this search used just a county and thus was more restrictive than one that included all the counties under Kaifeng as a superior prefecture.

10. *Associations* Output Table

A search in **LookAtAssociations** produces two tables of results: **Associations** and **People in Associations**. As the names suggest, the Associations table lists all the records for association that meet the criteria given by the user., while People in Associations lists all the people involved in those associations.

   (a) The Structure of the Table

The **Associations** table has 19 columns to display the types of information recorded in the ASSOC_DATA table:

Name (Pinyin)
Name (Chinese)
Index Year
Sex
Associated Person's Name (Pinyin)
Associated Person's Name (Chinese)
Associated Person's Index Year
Associated Person's Sex
Association Category (English)
Association Category (Chinese)
Association Count   This gives the number of objects or events that
                                               established the association
Address (Pinyin)   This is the index address, if known.
Address (Chinese)

| X-coordinate	These are the coordinates for the centroid for the
Y-coordinate	address above.
Associate's Address (Pinyin)	
Associate's Address (Chinese)	
Associate's X-coordinate	
Associate's Y-coordinate	
Kinship Relation (English)	The next four columns are for associations created through actions for the sake of a kin
Kinship Relation (Chinese)	
Kin Name (pinyin)	
Kin Name (Chinese)	
Associate's Kinship Relation (English)	The next four columns are for associations created through actions for the sake of the associate's kin
Associate's Kinship Relation (Chinese)	
Associate's Kin Name (pinyin)	
Associate's Kin Name (Chinese)	
Distance	If CBDB has the coordinates for the place identification for both people, it calculates the great-circle arc distance between them (in kilometers).

(b) Sorting

The output tables can be sorted on any of the columns (except a memo field line Notes). To sort, one right-clicks on the column header (the label) for the field. In this example, the table will be sorted on the *index year* of the person in the record:
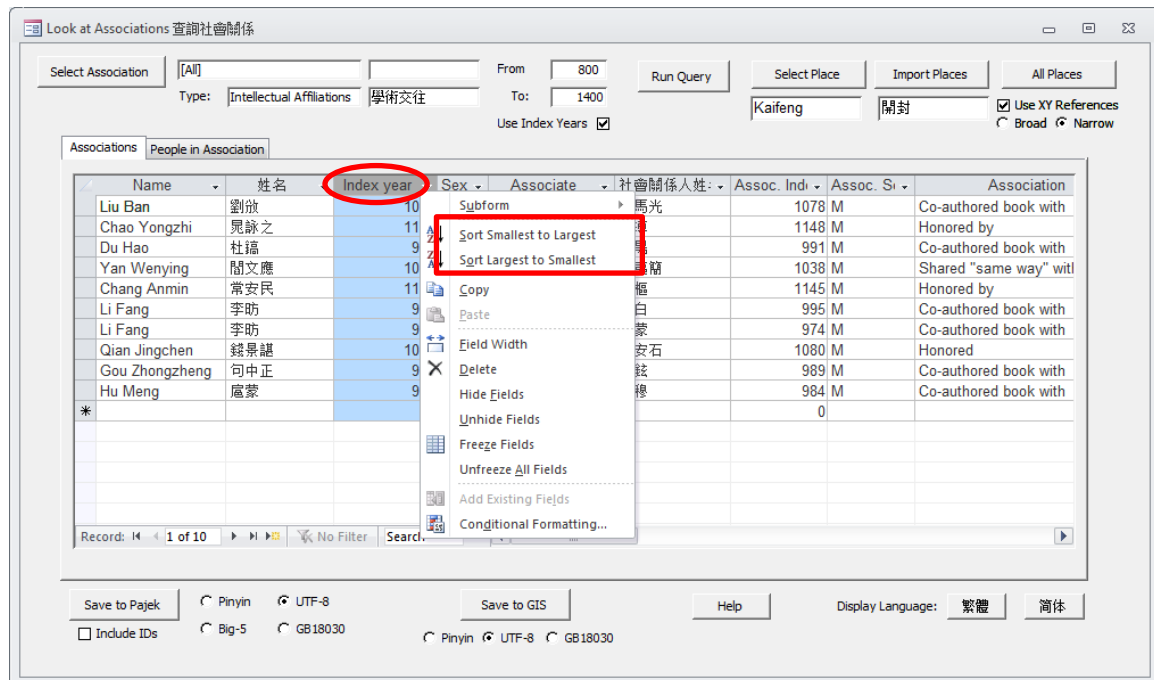

(c) Exporting the Search Results

If one wishes to export the results of a search, one can click on the square in the upper left-hand corner of the table to select all the records in the table. One can then copy

the table in the usual manner (**Ctrl-c**), open **Excel** (or any other compatible *spreadsheet* software) or create a new *text* file and open it with **Notepad** (or any preferred software) and paste the results (**Ctrl-v**).
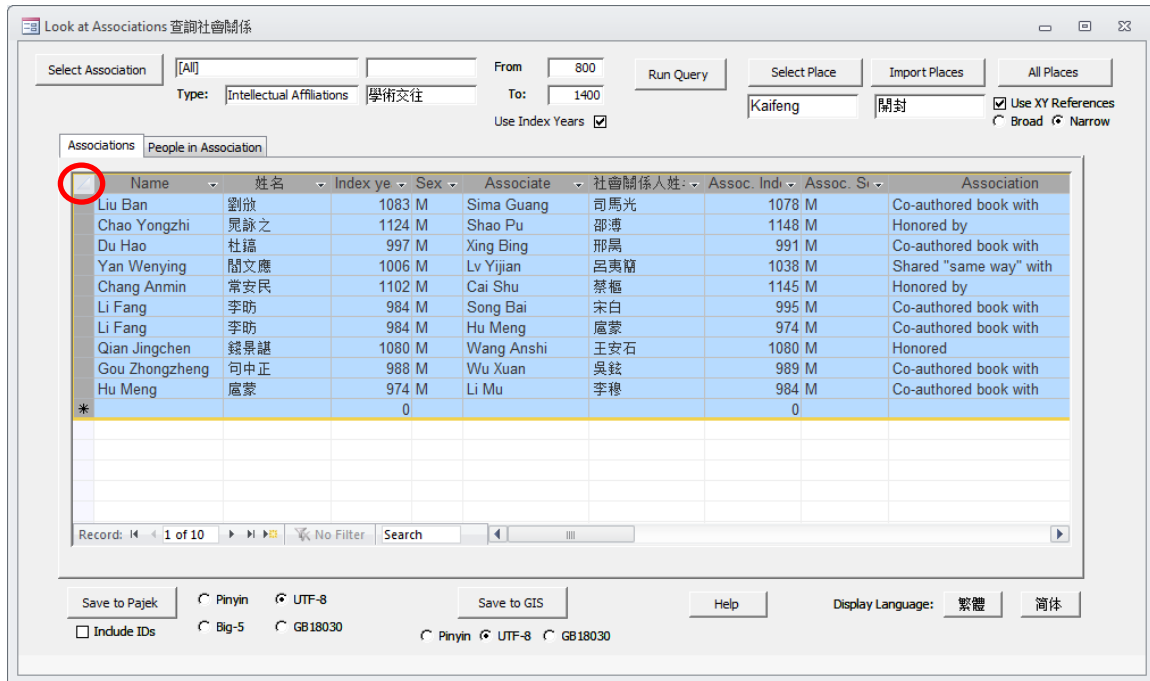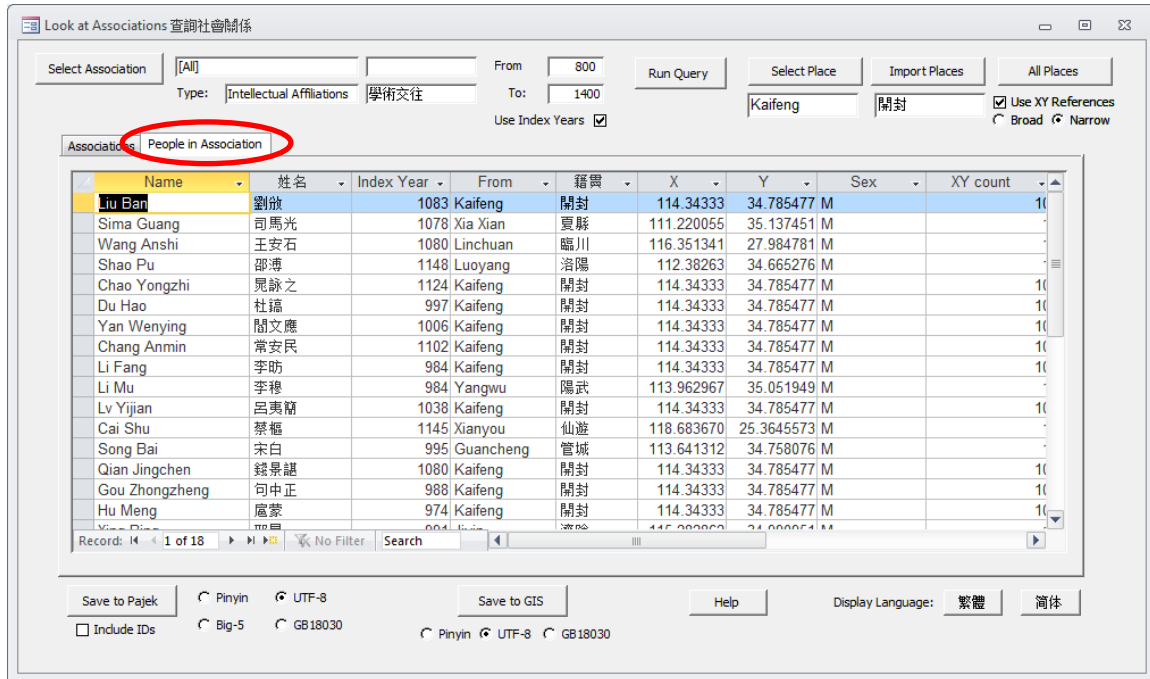

One also can select a specific block of records to copy by left-clicking on the left-hand column of the table, holding the mouse-button down and dragging to copy the block:
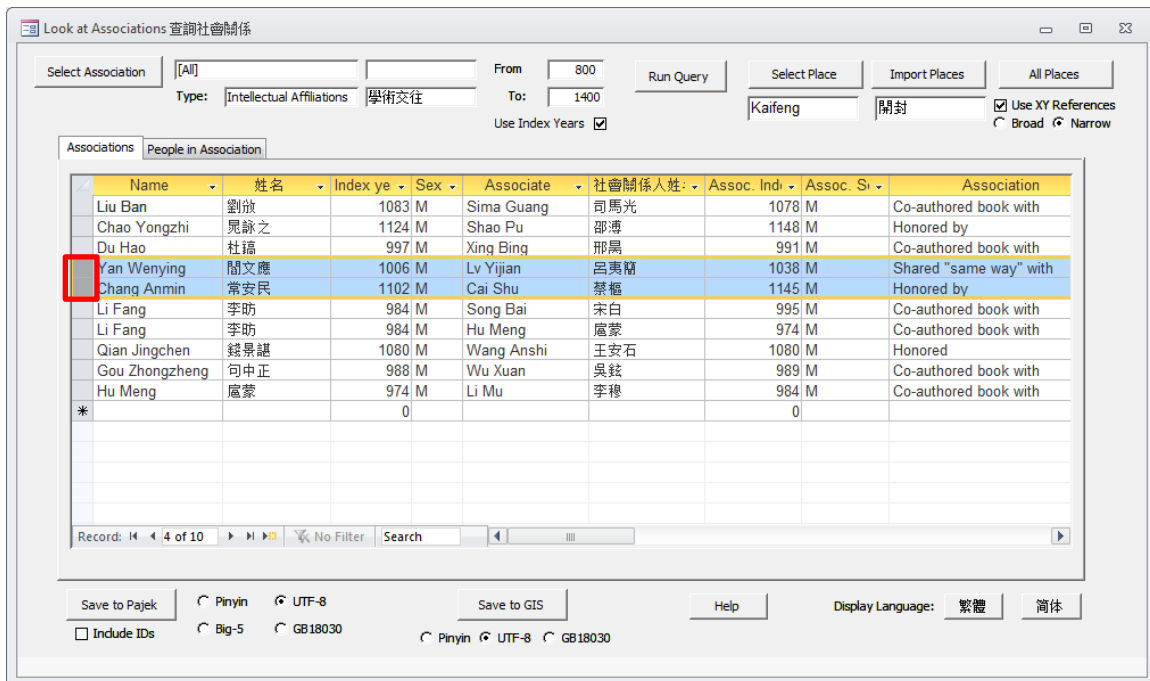
One then uses **Ctrl-c** to copy and **Ctrl-v** to paste in the usual manner.

11. *People in Associations* Output Table

In addition to the table of associations, **LookAtAssociations** also provides a table listing all the people involved in the association one is investigating. One views this table simply by clicking on the tab **People in Association**. The "People" table provides information about association with place.

This table has nine columns:

> Name (pinyin)
> Name (Chinese)
> Index Year
> Sex
> Place Association (pinyin)
> Place Association (Chinese)
> X-coordinate
> Y-coordinate
> XY-count

People in Associations, like the **Associations** table, can be sorted on any column and can be copied in the same way as the **Associations** table.

12. *Save to Pajek* Command Button

Since association data provides an implicit social network linking the groups of people connected by the category of association being examined, one can save the network for analysis in the Pajek format by clicking on the **Save to Pajek** button. The Pajek format is one standard format for visualization in *social network analysis* (SNA), and many programs can read it and convert it to other formats.

CBDB allows files for Pajek to be saved in different text encodings to enable the use of Chinese characters. Depending on whether the user is in a Chinese Windows environment or an English will determine whether to use GB18030 (Chinese) or UTF-8 (English) encoding for the Chinese characters. Note that there also is an option to include the Person ID with the node information in the Pajek files. Once the user has selected the appropriate options and clicks on **Save to Pajek**, a window will open for the user to choose the name and location of the Pajek file. The default extension is ".net:"
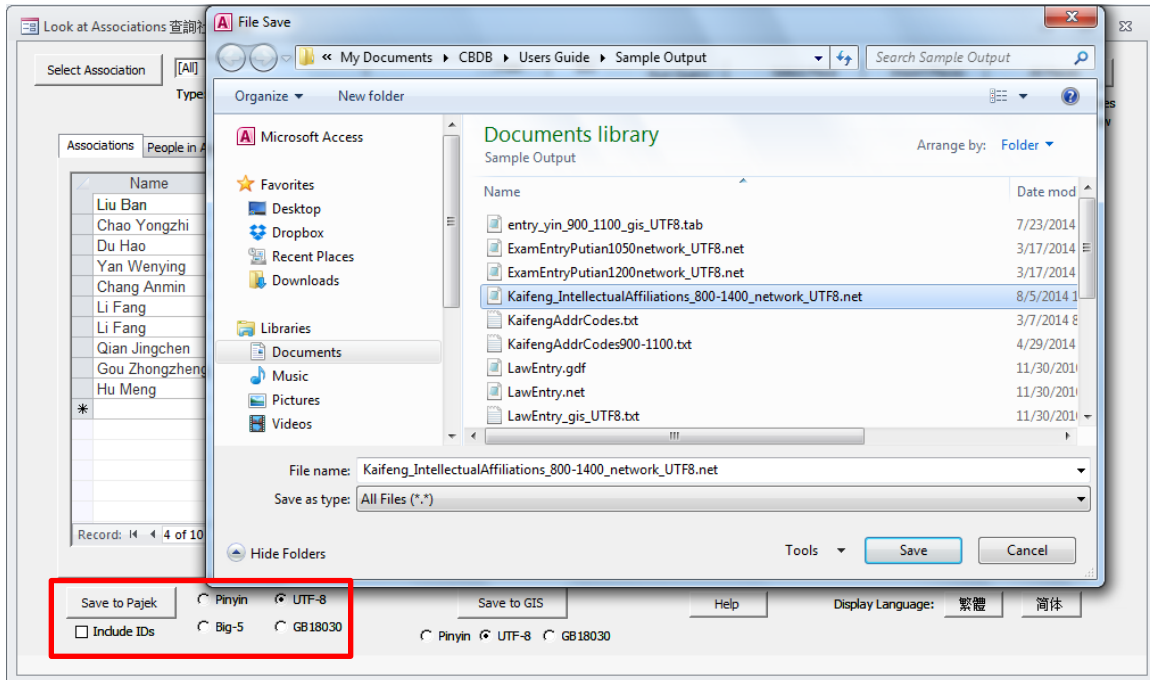
13. *Save to GIS* Command Button

Data on associations have a geographic component and may reveal significant geographic patterns of distribution that shift over time. In order to allow the user to explore this geographic component, CBDB exports the GIS (Geographic Information Systems) data to a commonly used file format (tab-delimited text) that can be imported into such programs as ArcGIS and QGIS.

Depending on whether the user is in a Chinese Windows environment or an English will determine whether to use GB18030 (Chinese) or UTF-8 (English) encoding for the Chinese characters. Or, if one does not want *any* characters, one can simply select *Pinyin*. To save the data to a GIS file, the user selects the appropriate encoding and clicks on **Save to GIS**. This will open a standard Windows "Save-to" window. Note that the default extension is ".tab" and if the user gives the file a different extension, CBDB will automatically append ".tab" to the file name:
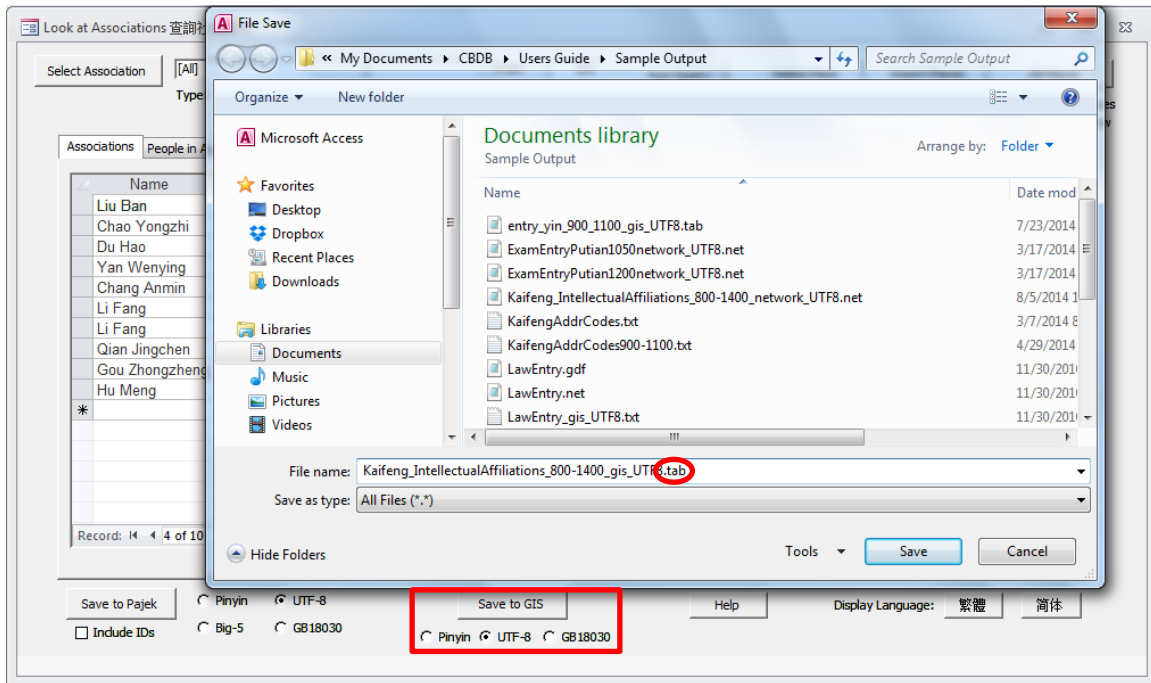
When **LookAtAssociations** saves the file, the record for each person includes the following fields:

> Name (Pinyin and Chinese)
> Male/Female
> Index Year
> Place Name (Pinyin and Chinese)
> XY coordinates
> XY count (the number of people in the table who share the same coordinates)

14. *Help* Command Button

The **Help** command button opens this file.

15. *Display Language* Command Buttons

Note that all of the forms have the option to switch the display labels among English, traditional or simplified Chinese. When one click on the "繁體" command button, all the form labels switch to traditional Chinese text (except those that are parts of bilingual pair, like "Name" and "姓名" in the table of results), and the button gives one the option to return to English:

Look at Associations 查詢社會關係

選擇社會關係 | [All] | | 始年 | 800 | 調查 | 選擇地名 | 輸入地名 | 所有地名
類別 | Intellectual Affiliations | 學術交往 | 終年 | 1400 | | Kaifeng | 開封 | ☑ 按經緯度查詢
利用指數年 ☑ | | ○ 廣 ● 狹窄

社會關係 | 社會關係的人

Name	姓名	Index ye	Sex	Associate	社會關係人姓:	Assoc. Ind	Assoc. S	Association
Liu Ban	劉攽	1083	M	Sima Guang	司馬光	1078	M	Co-authored book with
Chao Yongzhi	晁詠之	1124	M	Shao Pu	邵溥	1148	M	Honored by
Du Hao	杜鎬	997	M	Xing Bing	邢昺	991	M	Co-authored book with
Yan Wenying	閻文應	1006	M	Lv Yijian	呂夷簡	1038	M	Shared "same way" with
Chang Anmin	常安民	1102	M	Cai Shu	蔡樞	1145	M	Honored by
Li Fang	李昉	984	M	Song Bai	宋白	995	M	Co-authored book with
Li Fang	李昉	984	M	Hu Meng	扈蒙	974	M	Co-authored book with
Qian Jingchen	錢景諶	1080	M	Wang Anshi	王安石	1080	M	Honored
Gou Zhongzheng	句中正	988	M	Wu Xuan	吳鉉	989	M	Co-authored book with
Hu Meng	扈蒙	974	M	Li Mu	李穆	984	M	Co-authored book with
*		0				0		

Record: |◄ ◄ 1 of 10 ► ►| ►□ | No Filter | Search

保存于Pajek | ○ Pinyin ● UTF-8 | 保存于GIS | 幫助 | 顯示語言: English | 简体
□ 包括 ID | ○ Big-5 ○ GB18030 | ○ Pinyin ● UTF-8 ○ GB18030