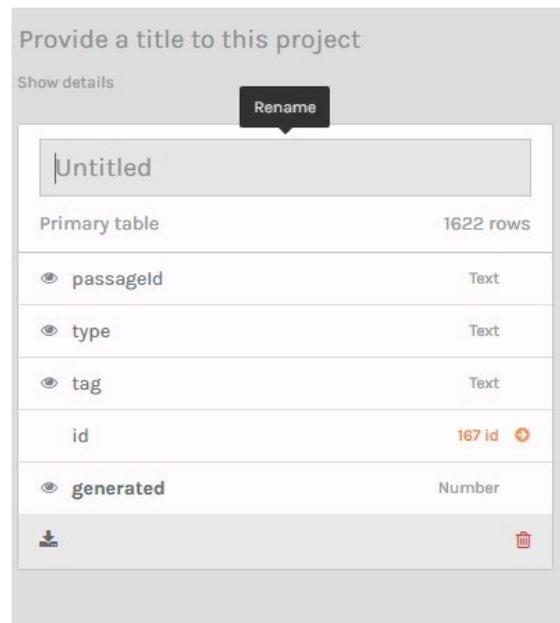


# HOW TO VISUALIZE EXPORTED DATA WITH PALLADIO IN VISUS

Prepared by Daniel Stumm, Brent Ho, and Hilde De Weerd

## PREPARING DATA FOR VISUALIZATION

### Step 1: Name the tables



**FIG. 1: RENAMING THE TABLE HEADINGS**

Type any name (Fig. 1). The following names are suggestions based on the content of the tables, listed clockwise from top to bottom (Fig. 2):

(1) tags

(2) bio\_main

(3) entry (= date, rank and other information on a person's entry into the bureaucracy)



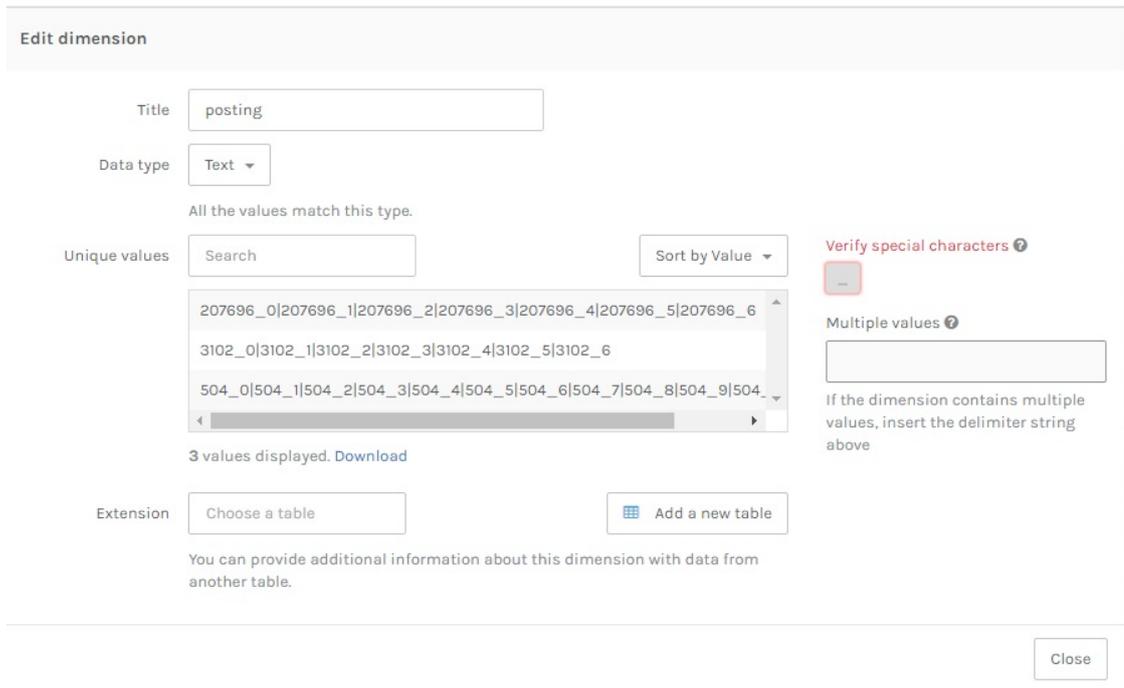
In order to use the data provided from the China Biographical Database (CBDB) in the Palladio view in VISUS follow the steps below. (The instructions first refer to the dimension, then the table in which you find this dimension, and lastly the table to link to by selecting it as the extension.)

1. Change the data type for “id” in the table “tags” to “Text” (Fig. 4)

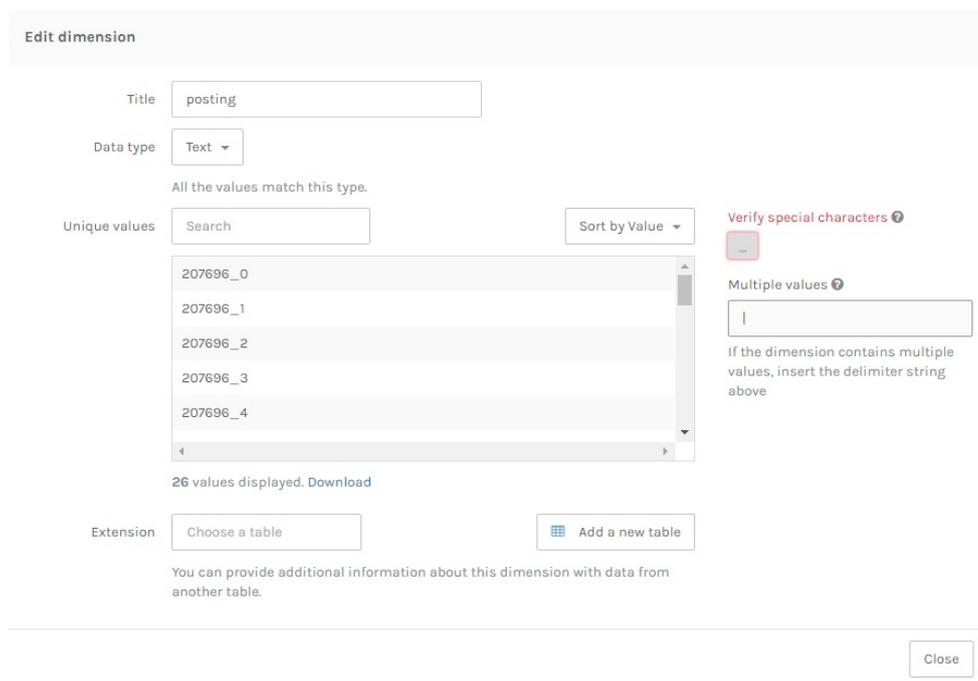
The screenshot shows the 'Edit dimension' interface. The 'Title' field is set to 'id'. The 'Data type' dropdown menu is open, displaying several options: 'Text' (Any text-based data), 'Number' (Numeric data such as 1234 or 1.234), 'Date' (Dates can be YYYY or YYYY-MM-DD), 'Coordinates' (Latitude, Longitude coordinates such as 12.345,67.890), and 'URL' (The URL of a website or image such as http://www.example.org/file.yyy). Below the dropdown, it indicates '208 values displayed' with a 'Download' link. The 'Extension' field is currently empty, with a 'Choose a table' button and an 'Add a new table' button. A 'Done' button is located at the bottom right of the interface.

**FIG. 4: CHANGING DATA TYPE OF “ID” IN TABLE “TAGS”**

2. Link the dimension “id” in the table “tags” to the table “tagext”
3. Link the dimension “bio\_main” in the table “tagext” to the table “bio\_main”
4. Link the dimension “entry” in the table “tagext” to the table “entry”
5. Link the dimension “posting” in the table “tagext” to the table “posting.” Insert | (horizontal bar) in the box “multiple values” to separate values for this dimension. (Fig. 5 and 6)



**FIG. 5: SEPARATING VALUES IN THE DIMENSION “POSTING,” BEFORE**



**FIG. 6: SEPARATING VALUES, AFTER**

In order to map the places associated with the persons marked up in the text, continue with the following steps:

1. Link the dimension “c\_addr\_id” in the table “bio\_main” to the table “address”

2. Link the dimension “posting\_c\_addr\_id” in the table “posting” to the table “address”

### **Step 3: Enable timeline filtering**

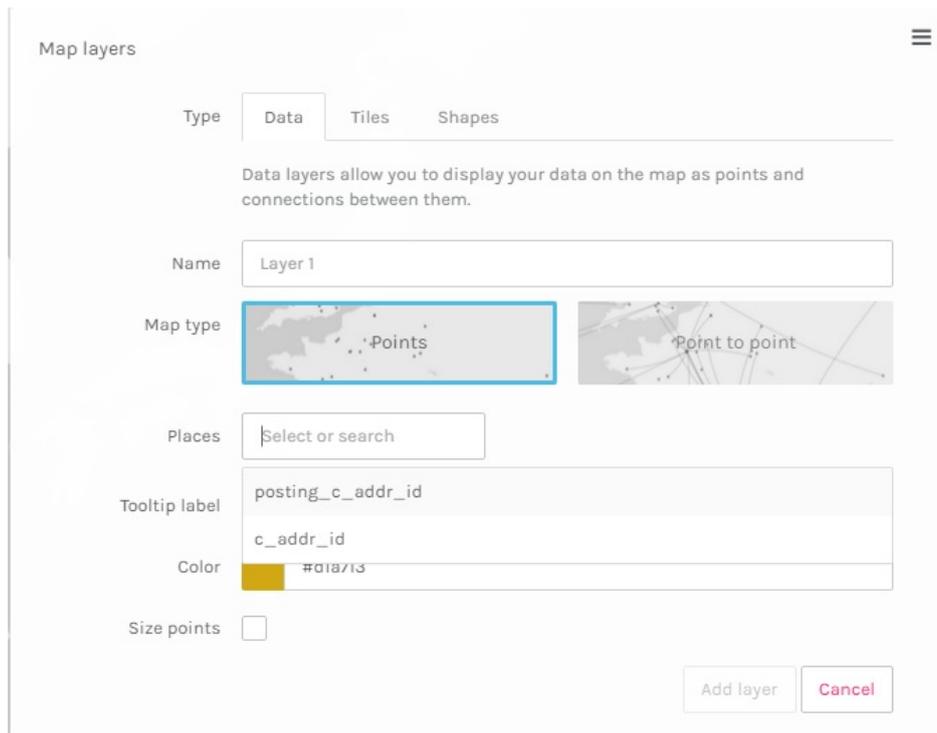
In order to use timeline filtering in the Palladio view in VISUS with CBDB, follow the steps below.

1. Change data type of “c\_index\_year” in the table “bio\_main” to “Date”
2. Change data type of “entry\_c\_year” in the table “entry” to “Date”
3. Change data type of “posting\_c\_firstyear” and “posting\_c\_lastyear” in the table “posting” to “Date”

### **Step 4a: Visualize data on a map**

Go to the “map” section. Click “new layer.” In the pop-up window select the geographical dataset by clicking in the box next to “Places.” Select the appropriate layer. Set a color of preference, then click “add layer.” You can select from different backgrounds by adding layers of terrain or street information from the “Tiles” menu. You can modify layers or delete them as appropriate.

The data we set in the default steps above allows you to create two layers on one map (Fig. 7), native place and postings addresses provided by China Biographical Database. (You will be able to add your own geographic data in the future in the metadata table or map places tagged in MARKUS.)

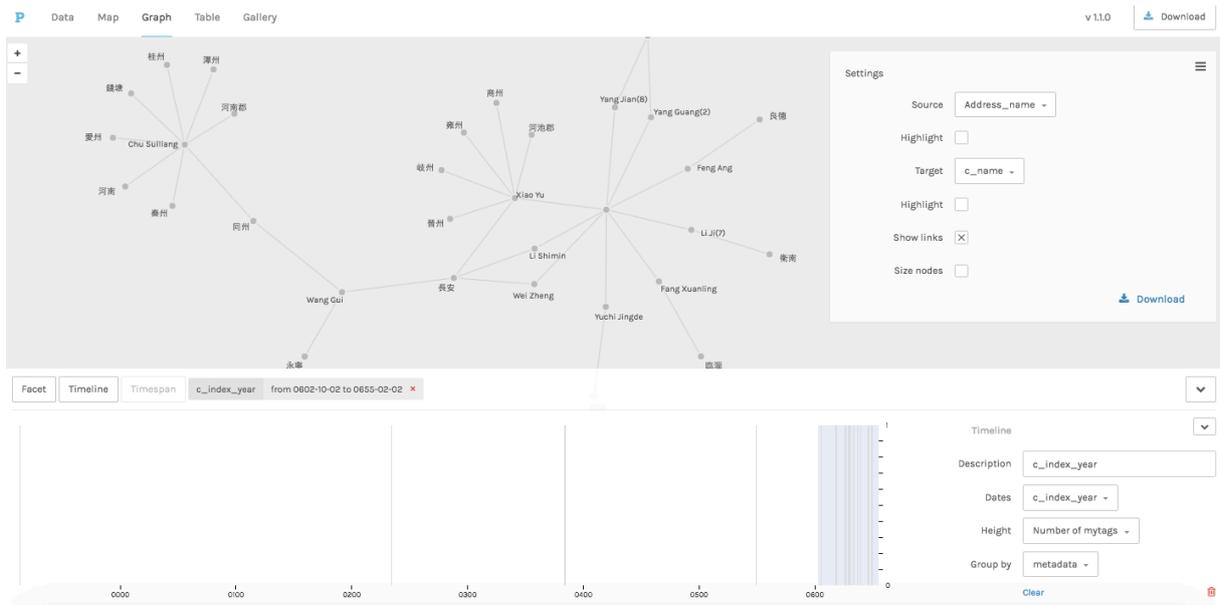


**FIG. 7: SELECTING DATA TO ADD NEW LAYERS**

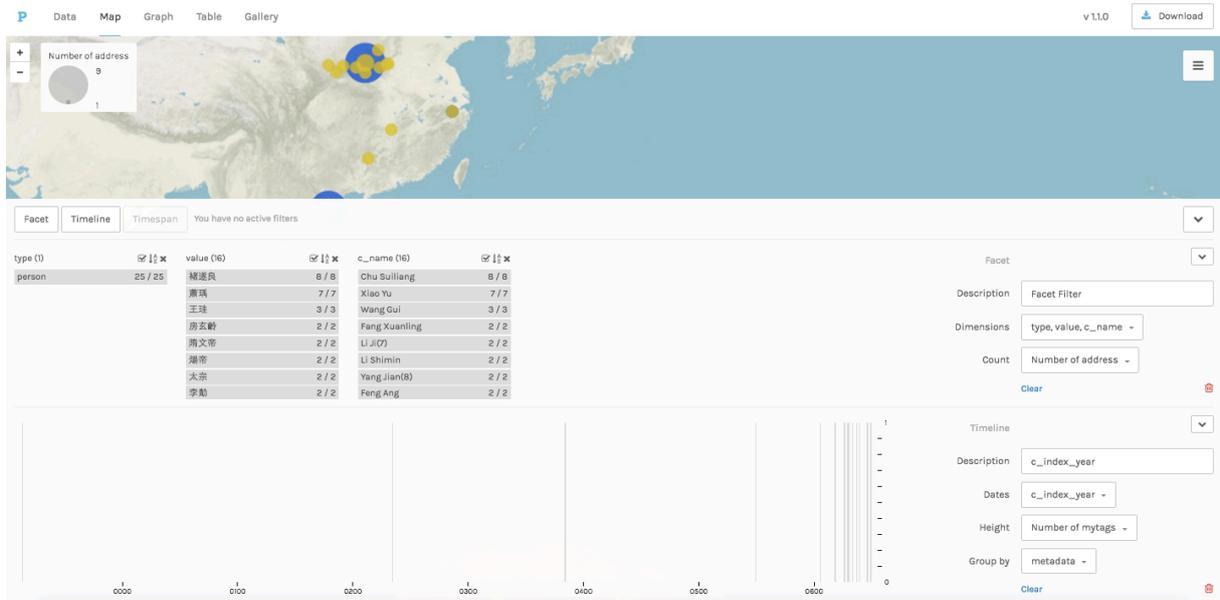
### **Step 4b: Visualize data in a graph**

In order to visualize the data in a graph, go to the “Graph” section. You can visualize the relation between two aspects of your choice. Click “source” and select the appropriate criterion. Then repeat this procedure to select a criterion as the “target.” (Fig. 8) You can manipulate the resulting graph by dragging or zoom in or out by clicking on the + and – buttons in the upper left corner.

**You can filter your data by adding “facets” or selecting a slice of time in the “timeline” in the Map and Graph views (Fig. 9).** Note that criteria available in facets will depend on establishing links between the tables (see step 2).



**FIG. 8: GRAPH VIEW WITH ACTIVE TIME FILTER**



**FIG. 9: FILTERING DATA USING FACETS AND TIMELINE IN THE MAP VIEW**