

## Scenario #2: Point to Point Map.

Let's say you want to map out how a collection of people (or letters, or XYZ...) traveled from point to point across time. You'll create a Point to Point Map View. The simplest way would be to create a table of information that will correspond to the Place Name and Coordinates data you've already created (See Scenario #1: Simple Map.)

### Step One:

In your spreadsheet program, enter information about the objects/people you wish to track across space and time. In this example, we have a **People** spreadsheet, listing **Names, Birthplaces, Arrival Points, and Dates of Birth**. You can, of course, create whatever categories you wish.

The point in this example is to visualize a group of historical actors who visited the principality of Monaco (thus all **Arrival Points** in this case are 'Monaco') to get a sense of the international appeal of the resort, and how this might have changed over time (hence the different birthdate of the actors involved).

In this case, we will see several points on a map (**Birthplaces**) converging on a single **Arrival Point**, but in your own visualizations you may have several points connecting with several other unique points (for instance, in a set of correspondence, with letters sent and received from and to several places).

\*\*\*Note the format in which we've entered the date: Year-Month-Day.

\*\*\*Note that we've entered our place names exactly to correspond to our existing **Places** table (created in the previous Scenario 'Simple Map'). Paris must be rendered identically in both tables – not as 'Paris' in one table and 'Paris, France' in the other.

A screenshot of a Microsoft Excel spreadsheet titled 'People'. The table has columns for Name, Birthplace, Arrival Point, and Birthdate. Most entries in the Arrival Point column are 'Monaco', except for a few like 'Paris' and 'London'. The Birthdate column shows various dates from the 18th to the early 20th century. The Excel ribbon at the top includes tabs for Home, Layout, Tables, Charts, SmartArt, Formulas, Data, and Review. The formula bar at the bottom shows the formula =TODAY() - A1. The status bar at the bottom right indicates 'Sum= 7423'.

	Name	Birthplace	Arrival Point	Birthdate
1	Aga Khan III	Karachi	Monaco	1877-11-2
2	Alice Heine	New Orleans	Monaco	1858
3	Anton Dolin	Sinclair	Monaco	1876-7-27
4	Antoine Chevré	Pv	Monaco	1865-1-13
5	Basil Zaharoff	Mugla	Monaco	1849-10-6
6	Basil Zaharoff	Mugla	Monaco	1849-10-6
7	Camille Blanc	Paris	Monaco	1847
8	Charles Wells	Hertfordshire	Monaco	1841-1-1
9	Charles Garnier	Paris	Monaco	1825-11-6
10	Coco Chanel	Saumur	Monaco	1883-7-19
11	Colette	Yonne	Monaco	1873-1-28
12	Constantin Radziwill	Minas	Monaco	1877-3-1
13	Consuelo Vanderbilt	New York	Monaco	1877-3-2
14	Duc de Valmy	Paris	Monaco	1802-3-14
15	Edith Wharton	New York	Monaco	1862-1-24
16	Edmond Blanc	Paris	Monaco	1856-2-22
17	Edward VII	London	Monaco	1841-11-9
18	Elsa Maxwell	Keokuk	Monaco	1883-5-24
19	Eugene Marquet	Monaco	Monaco	1864
20	François Blanc	Paris	Monaco	1850
21	François Blanc	Courtheon	Monaco	1806-12-12
22	Gerald Murphy	Boston	Monaco	1888-3-25
23	Grace Kelly	Philadelphia	Monaco	1929-11-12
24	Gustav V	Drottninghol	Monaco	1858-6-16
25	Gustave Doré	Strasbourg	Monaco	1832-6-1
26	Henri Schmid	Neuchâtel	Monaco	1851
27	Jeanne d'Arc	Germany	Monaco	1419
28	Hippolyte de Villemessant	Rouen	Monaco	1810-4-22
29	Hiran Maxim	Sangererville	Monaco	1840-2-5
30	Joseph Jagger	Yorkshire	Monaco	1830-9-1
31	Jules-Laurent Dutrou	Paris	Monaco	1819-4-16
32	La Belle Otero	Galicia	Monaco	1868-11-4
33	Lady Victoria Hamilton	Lanarkshire	Monaco	1850-12-11
34	François Lefebvre	Paris	Monaco	1800
35	Georges Feydeau	Paris	Monaco	1862
36	Leon Radziwill	Saint Cloud	Monaco	1880-9-6
37	Leopold II	Brussels	Monaco	1835-4-9
38	Louise Blanc	Paris	Monaco	1854
39	Ludwig Jacobi	Germany	Monaco	1800
40	Marie Edith Blanc	Paris	Monaco	1856-12-23

## Step Two:

Upload your **People** table directly into the Palladio interface, by cutting and pasting. Click **Load Data**. The **People** table has now been uploaded, as ‘Untitled.’ Click the ‘Untitled’ field to rename it ‘People.’

The screenshot shows the Palladio interface with the title 'Palladio'. Below it, a 'Primary table' section is displayed. A sample CSV file is shown with 11 rows of data:

	Name	Birthplace	Arrival Point	Birthdate
1	Aga Khan III	Karachi	Monaco	1877-11-2
2	Alice Heine	New Orleans	Monaco	1858
3	Anton Dolin	Slinfold	Monaco	1904-7-27
4	Antony Noghes	Py	Monaco	1890-9-13
5	Basil Zaharoff	Mugla	Monaco	1849-10-6
6	Camille Blanc	Paris	Monaco	1847
7	Charles Wells	Hertfordshire	Monaco	1841-1-1
8	Charles Garnier	Paris	Monaco	1825-11-6
9	Coco Chanel	Saumur	Monaco	1883-7-19
10	Colette Yonne	Monaco		1873-1-28

A blue 'Load data' button is located at the bottom of the table area.

The screenshot shows the Palladio interface with the title 'Palladio'. Below it, a 'Primary table' section is displayed with the name 'People' highlighted. A 'Rename' button is visible above the table. The table has four columns: Name, Birthplace, Arrival Point, and Birthdate. Each column has a 'Review' button next to it. To the right of the table, there is a 'Secondary table(s)' section with the following text:

You can add additional tables by extending fields in your existing tables. For example, if your primary table is a list of letters, each letter may have an author. You can extend the author field and upload a new file with additional bibliographic information about the people who appear as authors in your letter table.

You can also extend secondary tables. For example, your table with bibliographic information may include a birth place, and you may want to extend this field with using a third table with additional information about locations, such as latitude and longitude coordinates.

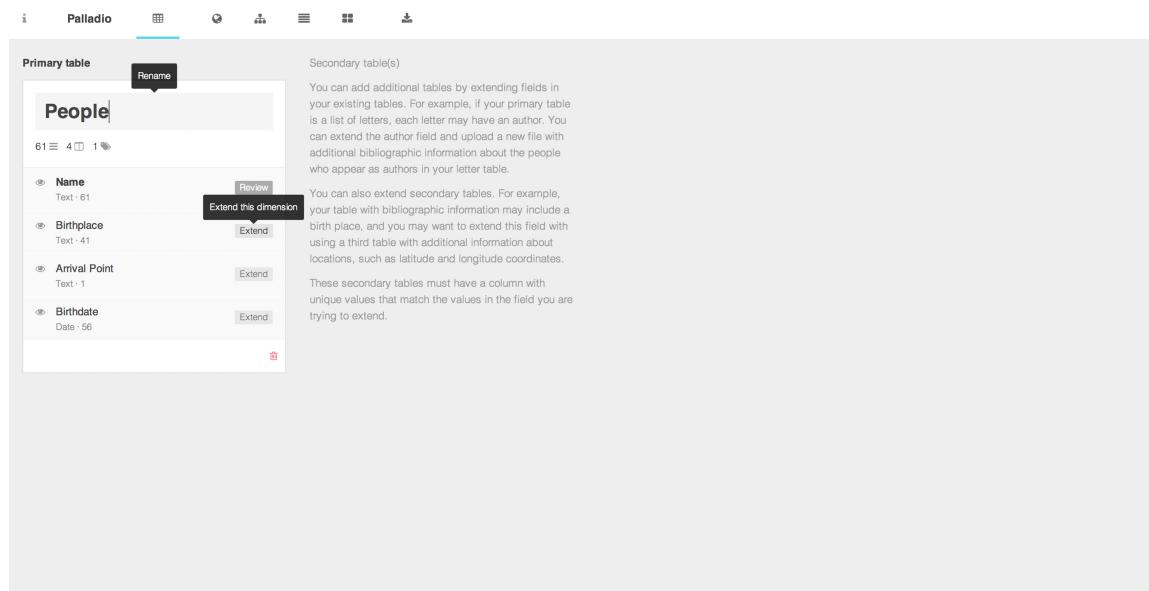
These secondary tables must have a column with unique values that match the values in the field you are trying to extend.

### Step Three:

Select the table dimension you wish to extend. In this case you want to link the information about the **Birthplaces** and **Arrival Points** of your **People** table to your existing **Coordinates** information (which you've created in a spreadsheet for the Simple Map Scenario).

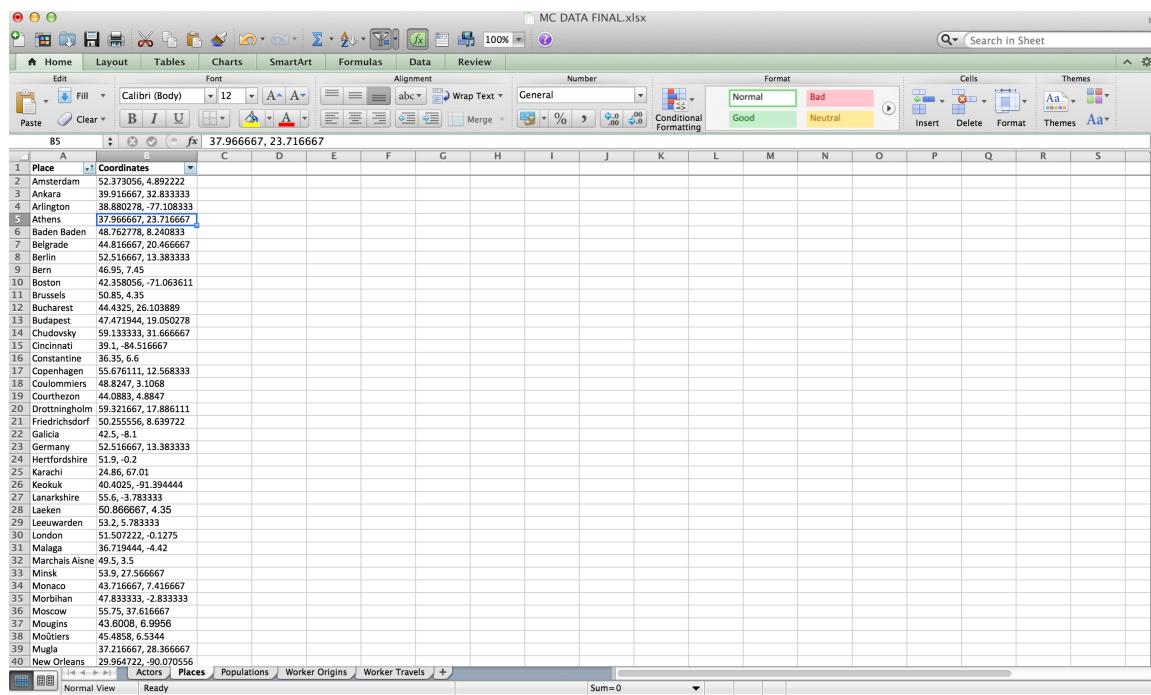
So we'll select the first dimension to extend: **Birthdates**.

A new window opens. At the bottom of this window is a prompt to **Add a New Table**.



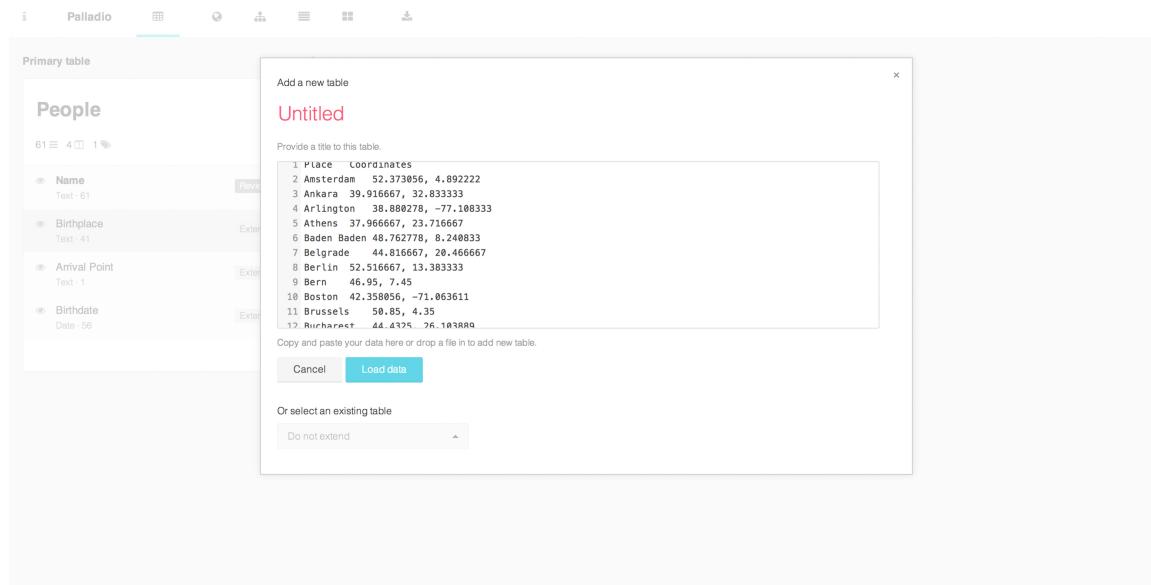
## Step Four:

Click on **Add a New Table**. An upload window appears. Now you will copy and paste the information (a list of place names and corresponding geographic coordinates) from your existing **Coordinates** Table. Click **Load Data**. Your Coordinates information now appears in a tabular view, linked to your **Birthplace** Dimension. Rename this newly uploaded table as **Places**.



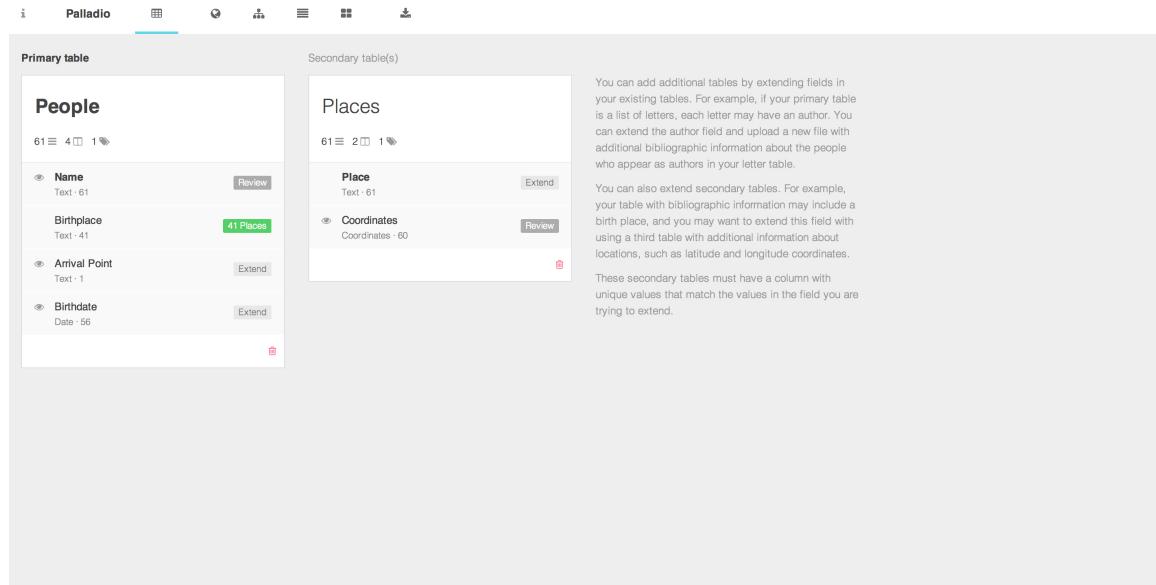
A screenshot of Microsoft Excel showing a table titled "Places" with columns "Place" and "Coordinates". The table lists various cities with their latitude and longitude coordinates. The "Coordinates" column contains entries like "52.373056, 4.892222" for Amsterdam and "39.916667, 32.833333" for Ankara.

	Place	Coordinates
1	Amsterdam	52.373056, 4.892222
2	Ankara	39.916667, 32.833333
3	Arlington	38.880278, -77.108333
4	Athens	37.966667, 23.716667
5	Baden Baden	48.2778, 8.240833
6	Belgrade	44.816667, 20.466667
7	Berlin	52.516667, 13.383333
8	Bern	46.95, 7.45
9	Boston	42.358056, -71.063611
10	Brussels	50.85, 4.35
11	Bucharest	44.4325, 26.103889
12	Budapest	47.471944, 19.050278
13	Chudovskiy	59.133333, 31.666667
14	Constantinople	40.710833, 24.516667
15	Constantine	36.35, 6.0
16	Copenhagen	55.676111, 12.568333
17	Coulommiers	48.8247, 3.1068
18	Courthezon	44.0883, 4.8847
19	Drottningholm	59.321667, 17.886111
20	Friedrichsdorf	50.255556, 8.639722
21	Galicia	42.5, -8.1
22	Germany	52.516667, 13.383333
23	Hertfordshire	51.9, -0.2
24	Kazan	55.75, 55.75, 67.01
25	Kesluk	40.4022, -91.394444
26	Lanarkshire	55.6, -3.783333
27	Lieken	50.866667, 4.35
28	Leeuwarden	53.2, 5.783333
29	London	51.507222, -0.1275
30	Malaga	36.719444, -4.42
31	Marchais Aisne	49.5, 3.5
32	Minsk	53.9, 27.566667
33	Monaco	43.713333, 7.416667
34	Neustadt	49.033333, 12.383333
35	Moscow	55.75, 37.616667
36	Moujins	43.6008, 6.9956
37	Mouiers	45.4858, 6.5344
38	Mugla	37.216667, 28.366667
39	New Orleans	29.964722, -90.070556

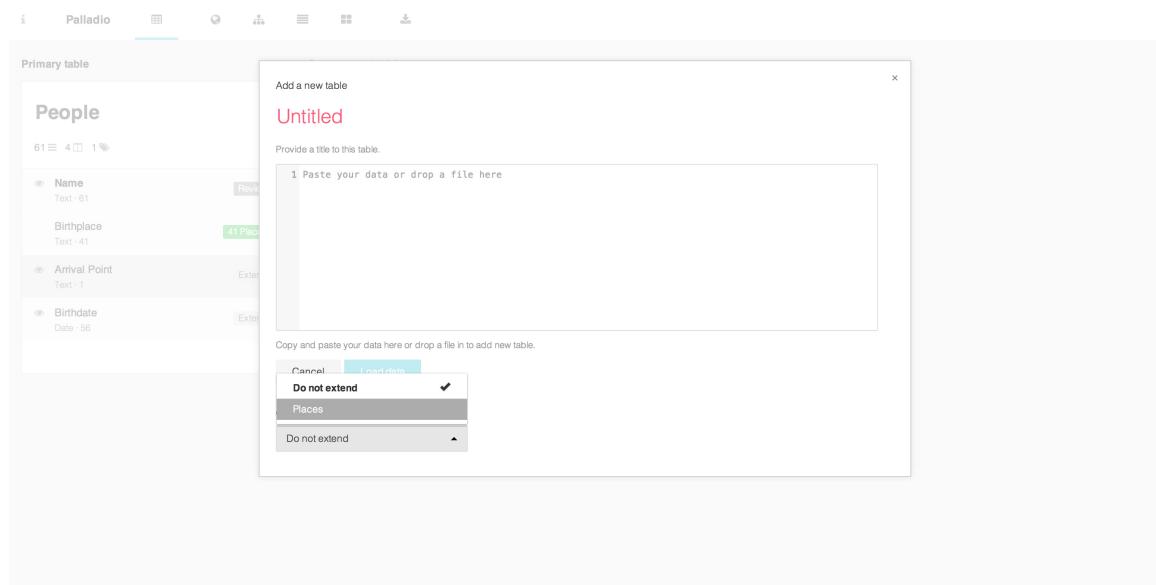


## Step Five:

Now, to see where the actors arrive, we will repeat the process, only this time by extending the **Arrival Point** dimension. The process is similar, except in this case you do not need to re-upload your **Coordinates** data. It now appears in the dropdown menu beneath Extension. Select **Places** from the dropdown menu. Your **People** and **Places** tables are now linked at both the **Birthplace** and **Arrival Points** dimensions.



The screenshot shows the Palladio interface with the Primary table on the left and Secondary table(s) on the right. The Primary table is titled "People" and contains fields: Name (Text - 61), Birthplace (Text - 41), Arrival Point (Text - 1), and Birthdate (Date - 56). The Secondary table is titled "Places" and contains fields: Place (Text - 61) and Coordinates (Coordinates - 60). There is an "Extend" button next to the Coordinates field. A tooltip explains how to extend tables by adding fields to existing ones or extending secondary tables with additional information.



The screenshot shows the Palladio interface with the Primary table on the left and an open "Add a new table" dialog box on the right. The Primary table is titled "People" and contains fields: Name (Text - 61), Birthplace (Text - 41), Arrival Point (Text - 1), and Birthdate (Date - 56). The dialog box is titled "Untitled" and contains a text area with placeholder "1 Paste your data or drop a file here". Below it is another text area with placeholder "Copy and paste your data here or drop a file in to add new table." At the bottom, there is a dropdown menu with options: "Do not extend" (selected), "Places", and "Do not extend".

Palladio

Primary table

**Places**

61 ≡ 2 □ 1 ▲

④ Name  
Text · 61

Review

Birthplace  
Text · 41

41 Places

④ Coordinates  
Coordinates · 60

Place  
Text · 61

Extend

Arrival Point  
Text · 1

1 matches in Places (via Place)

1 Places

④ Birthdate  
Date · 56

Extend

Secondary table(s)

Places

61 ≡ 2 □ 1 ▲

Place  
Text · 61

Coordinates  
Coordinates · 60

Review

You can add additional tables by extending fields in your existing tables. For example, if your primary table is a list of letters, each letter may have an author. You can extend the author field and upload a new file with additional bibliographic information about the people who appear as authors in your letter table.

You can also extend secondary tables. For example, your table with bibliographic information may include a birth place, and you may want to extend this field with using a third table with additional information about locations, such as latitude and longitude coordinates.

These secondary tables must have a column with unique values that match the values in the field you are trying to extend.

## Step Six:

Select the **Map** view from the control panel. Now, from the **Map Type** dropdown menu, select **Point to Point**. In the **Source Places** dropdown menus, select **Birthplace** and **Arrival Point** (or whatever you've labeled these dimensions in your own data). You are presented with a Point to Point map. In this case, the map shows the Birthplaces of several people converging in Monaco. Toggling **Size points** will show how frequently particular coordinates have shown up within the **People** data (ie. Paris will be larger than others as many people in this data set were born in Paris, and Monaco, upon which everyone converged, will be largest of all).

Hovering over a particular dot will reveal its label (in this case the place name). Hovering on a line will reveal the connection. The **tooltip label** function can be toggled to change what information is shown upon hovering (in this case the coordinates.)

