

## 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:

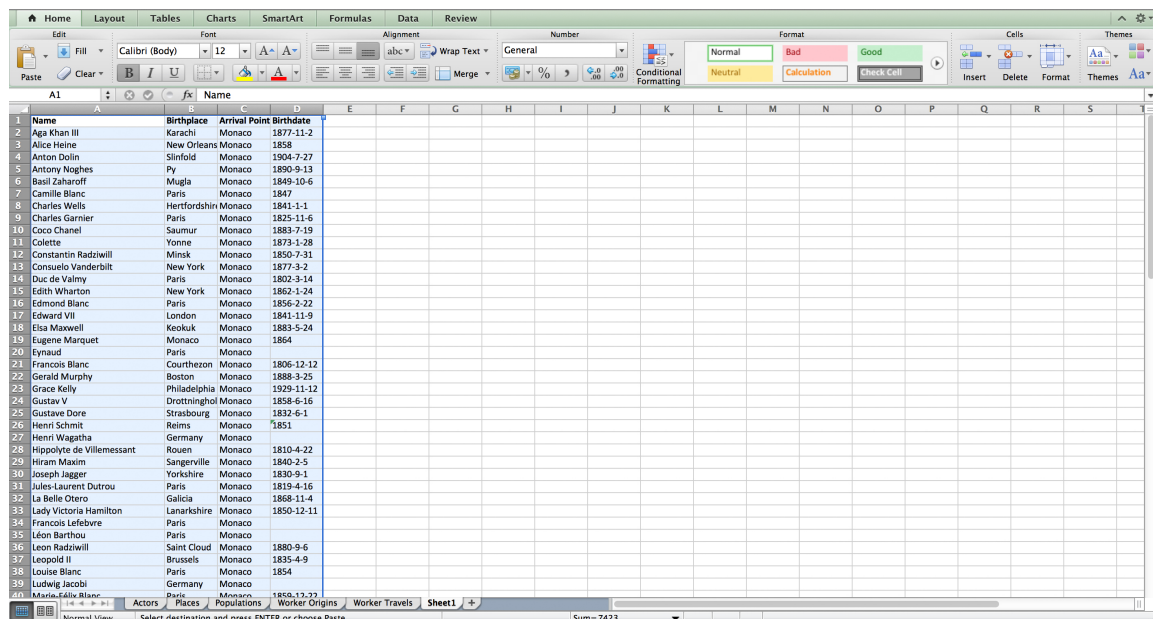
In your spreadsheet program, enter information about the objects/people you wish to track across space and time. In this example, we have a **People** spreadsheet, listing **Names, Birthplaces, Arrival Points, and Dates of Birth**. You can, of course, create whatever categories you wish.

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.



	Name	Birthplace	Arrival Point	Birthdate
1	Aga Khan III	Karachi	Monaco	1877-11-2
2	Alice Heine	New Orleans	Monaco	1858
3	Anton Dolin	Silfifold	Monaco	1904-7-27
4	Antony Hughes	Py	Monaco	1890-9-13
5	Basil Zaharoff	Mugla	Monaco	1849-10-6
6	Camille Blanc	Paris	Monaco	1847
7	Charles Wells	Hertfordshir	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
11	Constantin Radziwill	Minsk	Monaco	1850-7-31
12	Consuelo Vanderbilt	New York	Monaco	1877-9-2
13	Duc de Valmy	Paris	Monaco	1802-3-14
14	Edith Wharton	New York	Monaco	1862-1-24
15	Edmond Blanc	Paris	Monaco	1856-2-22
16	Edward VII	London	Monaco	1841-11-9
17	Elsa Maxwell	Kookuk	Monaco	1883-5-24
18	Eugene Marquet	Monaco	Monaco	1864
19	Eynaud	Paris	Monaco	
20	Francois Blanc	Courthoron	Monaco	1806-12-12
21	Gerald Murphy	Boston	Monaco	1888-3-25
22	Grace Kelly	Philadelphia	Monaco	1929-11-12
23	Gustav V	Drottninghol	Monaco	1858-6-16
24	Gustave Dore	Strasbourg	Monaco	1832-6-1
25	Henri Schmitt	Reims	Monaco	1851
26	Henri Wagatha	Germany	Monaco	
27	Hippolyte de Villemessant	Rouen	Monaco	1810-4-22
28	Hiram Maxim	Sangerville	Monaco	1840-2-5
29	Joseph Jagger	Yorkshire	Monaco	1830-9-1
30	Jules-Laurent Dutrou	Paris	Monaco	1819-4-16
31	La Belle Otero	Galicia	Monaco	1868-11-4
32	Lady Victoria Hamilton	Lanarkshire	Monaco	1850-12-11
33	Francois Lefebvre	Paris	Monaco	
34	Léon Barthou	Paris	Monaco	
35	Leon Radziwill	Saint Cloud	Monaco	1880-9-6
36	Leopold II	Brussels	Monaco	1835-4-9
37	Louise Blanc	Paris	Monaco	1854
38	Ludwig Jacobi	Germany	Monaco	
39	Maria, Edith Blanc	Paris	Monaco	1868-12-21

## 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.’

**Primary table**

Your primary table is the main entity you want to visualize. It could be either an object, like a person or a letter, or a more abstract concept, like a relationship. Once you have loaded your primary table, you will be able to extend fields in the primary table with additional information.

We recommend that your primary table include a unique key, which can be used to uniquely identify the different entities in the table.

1	Name	Birthplace	Arrival Point	Birthdate
2	Aga Khan III	Karachi	Monaco	1877-11-2
3	Alice Heine	New Orleans	Monaco	1858
4	Anton Dolin	Slinfold	Monaco	1984-7-27
5	Antony Noghes	Py	Monaco	1898-9-13
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	1893-7-19
11	Colette Yonne	Monaco	Monaco	1873-1-28

[Load data](#)

**Primary table**

**People**

61 4 1

Name	Birthplace	Arrival Point	Birthdate
Text · 61	Text · 41	Text · 1	Date · 56

[Rename](#) [Review](#) [Extend](#) [Extend](#) [Extend](#)

**Secondary table(s)**

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.

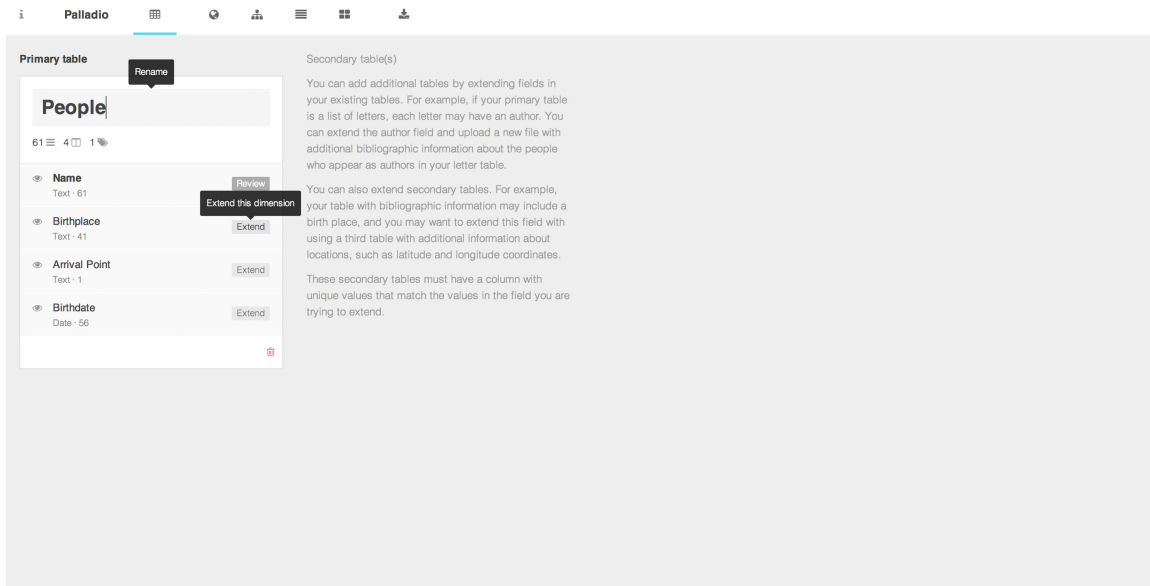
These secondary tables must have a column with unique values that match the values in the field you are trying to extend.

### 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).

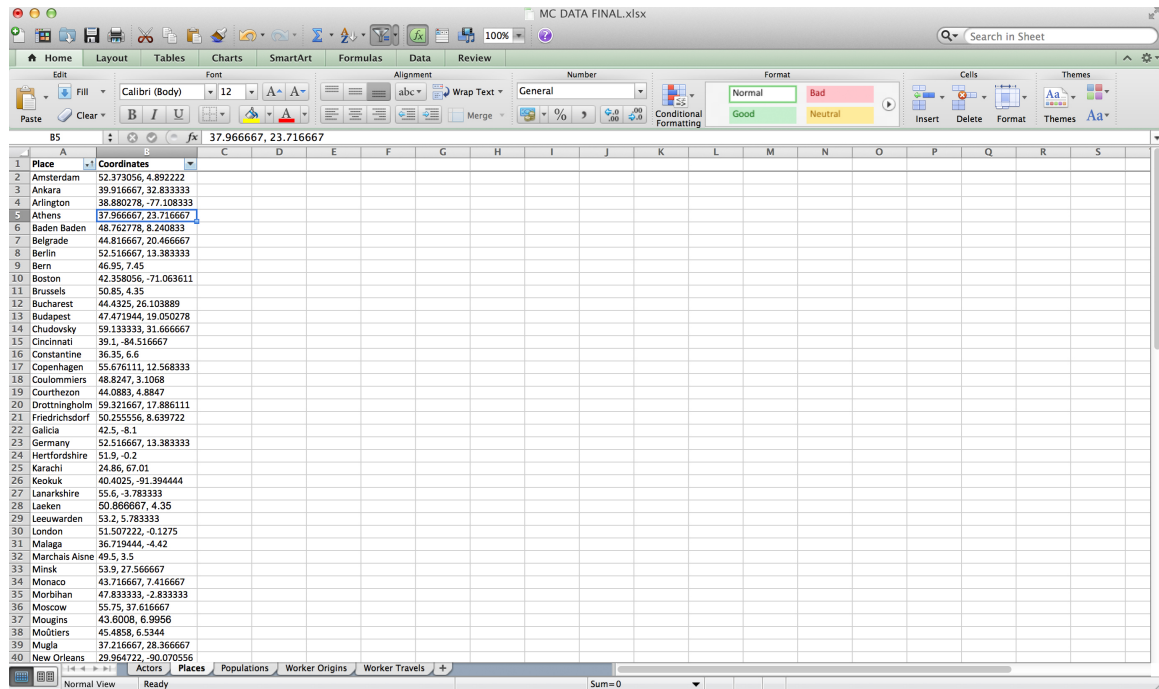
So we'll select the first dimension to extend: **Birthdates**.

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



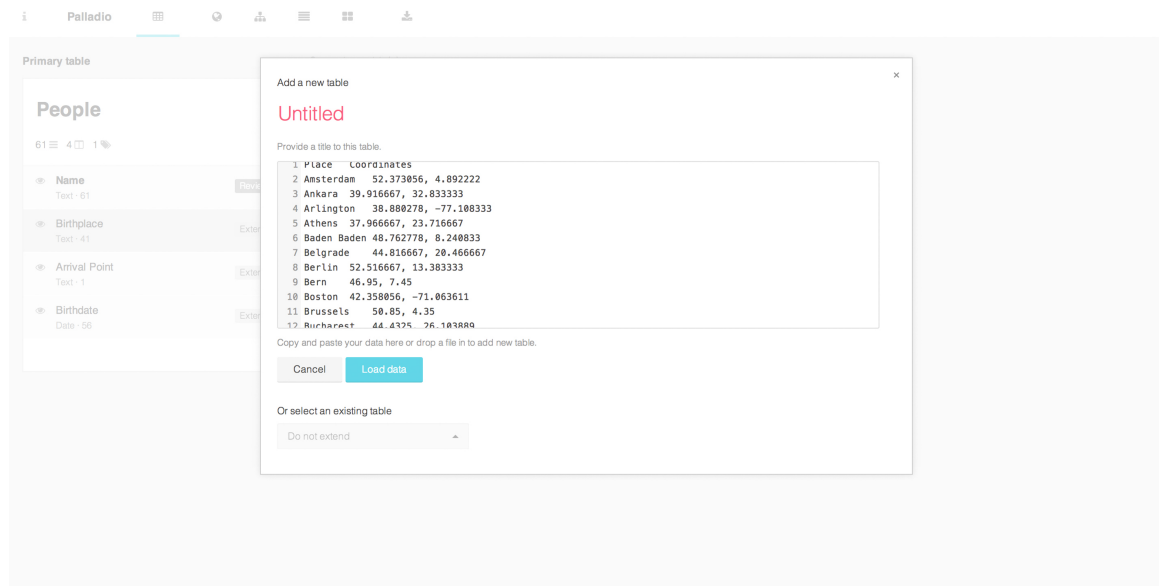
## Step Four:

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**.



The screenshot shows an Excel spreadsheet with a table containing the following data:

Place	Coordinates
Amsterdam	52.373056, 4.892222
Ankara	39.916667, 32.833333
Arlington	38.880278, -77.108333
Athens	37.966667, 23.716667
Baden Baden	48.762778, 8.240833
Belgrade	44.816667, 20.466667
Berlin	52.516667, 13.383333
Bern	46.95, 7.45
Boston	42.358056, -71.063611
Brussels	50.85, 4.35
Bucharest	44.4325, 26.103889
Budapest	47.471944, 19.050278
Chudovsky	59.133333, 31.666667
Cincinnati	39.1, 84.516667
Constantine	36.35, 6.6
Copenhagen	55.676111, 12.568333
Coulommiers	48.8247, 3.1068
Courtheon	44.0883, 4.8847
Drottingholm	59.321667, 17.886111
Friedrichsdorf	50.255556, 8.639722
Galicia	42.5, -8.1
Germany	52.516667, 13.383333
Hartfordshire	51.9, -0.2
Karachi	24.86, 67.01
Keokuk	40.4025, -91.394444
Lanarkshire	55.6, -3.783333
Laeken	50.866667, 4.35
Leeuwarden	53.2, 5.783333
London	51.507222, -0.1275
Malaga	36.719444, -4.42
Marchais Aisne	49.5, 3.5
Minsk	53.9, 27.566667
Monaco	43.716667, 7.416667
Morbihan	47.833333, -2.833333
Moscow	55.75, 37.616667
Mougins	43.6008, 6.9956
Moutiers	45.4858, 6.5344
Mugla	37.216667, 28.366667
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.

**Primary table**

**People**

61 4 1

**Name**  
Text · 61 Review

**Birthplace**  
Text · 41 41 Places

**Arrival Point**  
Text · 1 Extend

**Birthdate**  
Date · 56 Extend

**Secondary table(s)**

**Places**

61 2 1

**Place**  
Text · 61 Extend

**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.

**Primary table**

**People**

61 4 1

**Name**  
Text · 61 Review

**Birthplace**  
Text · 41 41 Places

**Arrival Point**  
Text · 1 Extend

**Birthdate**  
Date · 56 Extend

**Add a new table**

Untitled

Provide a title to this table.

1 Paste your data or drop a file here

Copy and paste your data here or drop a file in to add new table.

Cancel Extend Birthplace

**Do not extend** ✓

**Places**

**Do not 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.)

