DigitalNomad

A Recipe for Creating your own Simile Exhibit

You will need:
* A web browser preferably as Firefox or Safari (Chrome can be used, but files must be uploaded to a server and cannot be used locally);
* Access to the internet;
* A text editor such as TextEdit, TextMate, NotePad, NotePad+++, Text Wranger, etc.
* Data!

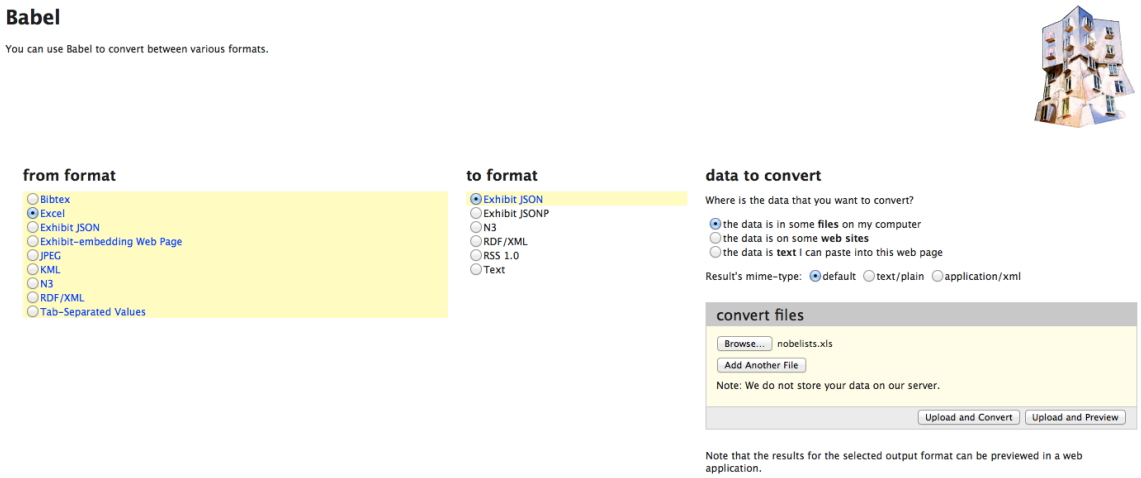
Steps:
1. You will find all the files for this Exhibit Workshop at:

http://digitalnomad.ie/ExhibitTutorialFiles.zip

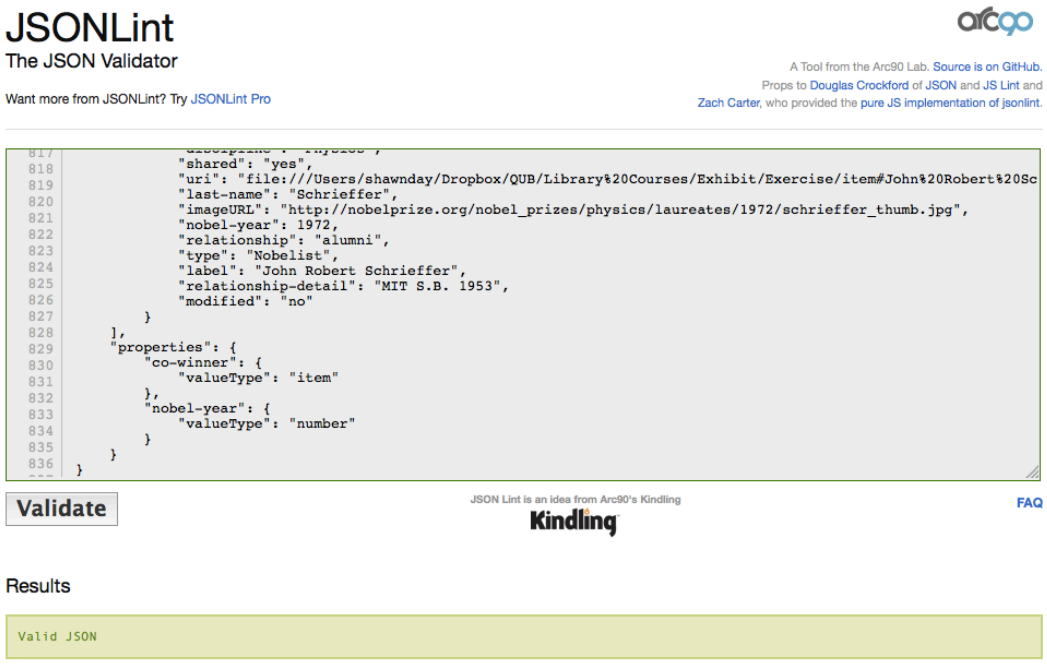
Save these files onto your desktop or wherever you would like to work from on your computer.

2. View the raw data file in Microsoft Excel. The filename is nobelists.xls. Open it now and inspect the data headers. How many Nobel Prize winners are represented in this data table?

3. We need to convert this data into a format that Exhibit can load. We will do this using an online tool called **Babel**. Babel is available from: http://service.simile-widgets.org/babel/ . Click the Excel button to indicate we will be sending the data table provided in XLS format. We are going to convert this to Exhibit JSON so choose this as the to Format. Finally, click the browse button and choose the XLS file nobelists.xls from your hard drive. After selecting the file, click Upload and Convert. Babel will do some magic and eventually we will have a formatted JSON file displayed in our browser.



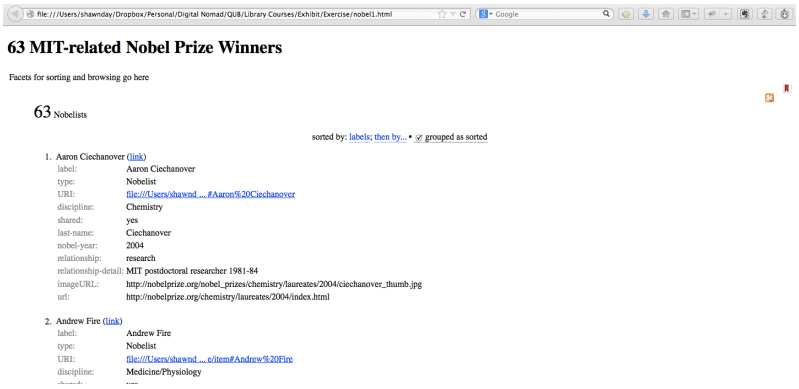
4. Select and copy the text displayed. We need to verify that the conversion has worked and the JSON is formatted correctly. To do this we use a JSON validator – http://jsonlint.com/ . Paste the text into the window on the screen an click the validate button.



If all has gone according to plan you should see the success statement at the bottom of the window and we have good data to start.

5. Paste this data into your text editor and save the file as nobelists.js or use the file http://eireidium.com/exhibit/step1/nobelists.js.

6. View the simplest exhibit by choosing the file index.html from the step1 directory/folder in your browser (preferably Firefox or Safari).



The result should look similar to this.

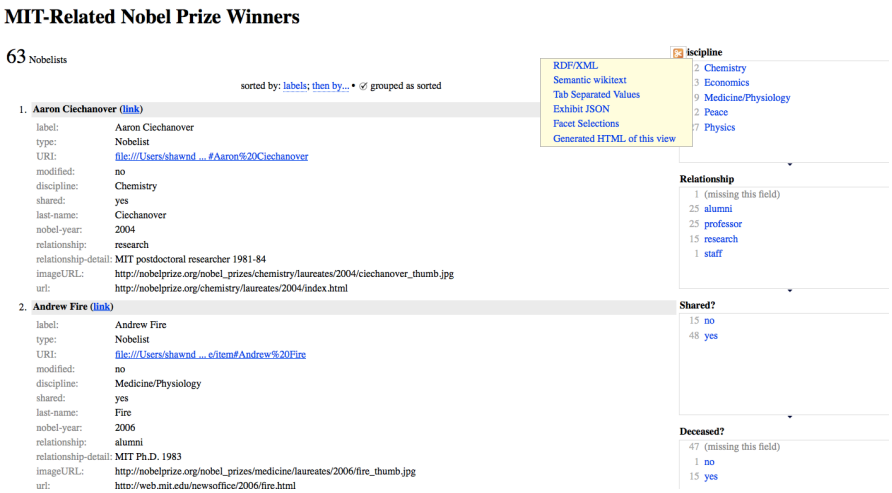
7. Provide filtering (faceted browsing) to your web page by adding the following four lines to your HTML code by replacing the text that currently says

```
<td width="25%">
   Facets Go Here
</td>
```

with

```
<td width="25%">
    <div ex:role="facet" ex:expression=".discipline"
ex:facetLabel="Discipline"></div>
    <div ex:role="facet" ex:expression=".relationship"
ex:facetLabel="Relationship"></div>
    <div ex:role="facet" ex:expression=".shared"
ex:facetLabel="Shared?"></div>
    <div ex:role="facet" ex:expression=".deceased"
ex:facetLabel="Deceased?"></div>
</td>
```

8. Reload the page and try browsing the 63 records using the facets now displayed above the list. *Can you tell how many MIT Nobel prize winners are still alive*?



9. Add a text search box to your web page by adding the following line within the <td></td> where you added the facets:

```
Search:<div ex:role="facet"
ex:facetClass="TextSearch"></div>
```

10. Specify an initial sort order by changing:

```
<div ex:role="view"></div>
```

to:

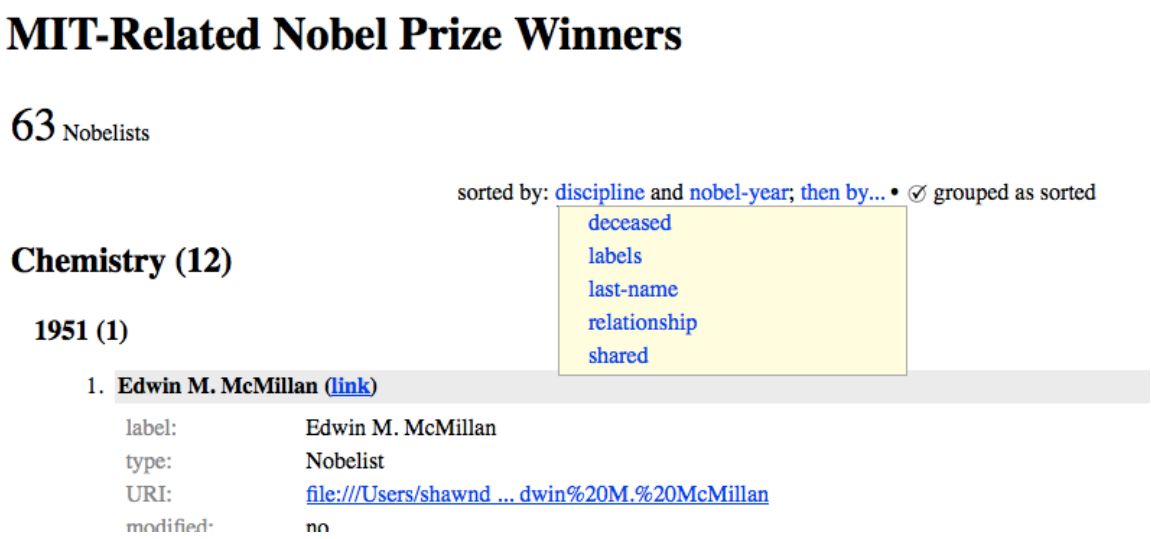
```
<div ex:role="view"
     ex:label="List"
     ex:orders=".discipline, .nobel-year"
     ex:possibleOrders=".label, .last-name,
.discipline, .relationship, .shared, .deceased, .nobel-
year">
</div>
```

11. Control the sorting functionality in your Exhibit by changing it again:

```
<div ex:role="view" ex:orders=".discipline, .nobel-
year" ex:possibleOrders=".label, .last-name,
.discipline, .relationship, .shared, .deceased, .nobel-
year">
</div>
```

12. Reload the page and note that you can now sort and sub-sort the

records in your Exhibit



13. Now let's add some visual enhancement to your Exhibit by inserting this tabular view within the

```
<div ex:role="viewPanel"></div>:

<div ex:role="exhibit-view"
     ex:viewClass="Exhibit.TabularView"
     ex:columns=".label, .imageURL, .discipline,
.nobel-year, .relationship-detail"
     ex:columnLabels="name, photo, discipline, year,
relationship with MIT"
     ex:columnFormats="list, image, list, list, list"
     ex:sortColumn="3"
     ex:sortAscending="false">
</div>
```

MIT-Related Nobel Prize Winners

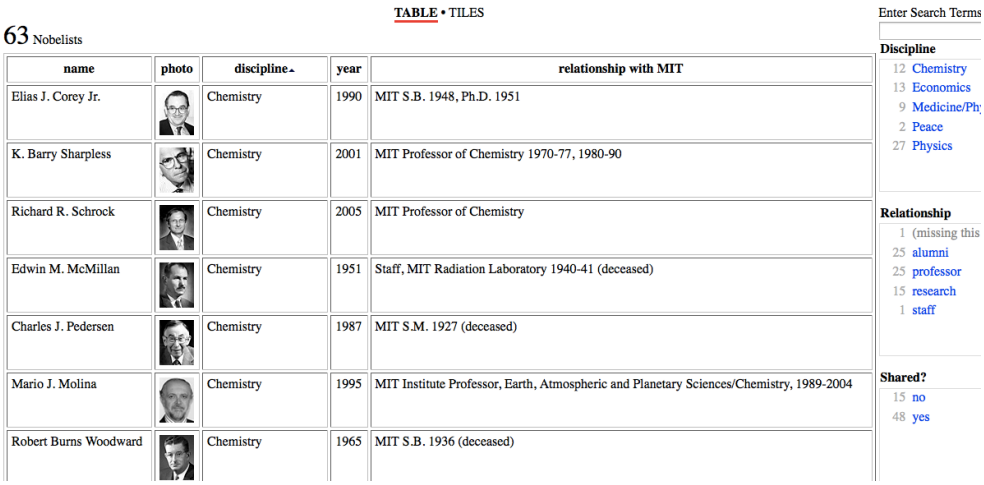


TABLE • TILES

63 Nobelists

name	photo	discipline	year	relationship with MIT
Elias J. Corey Jr.		Chemistry	1990	MIT S.B. 1948, Ph.D. 1951
K. Barry Sharpless		Chemistry	2001	MIT Professor of Chemistry 1970-77, 1980-90
Richard R. Schrock		Chemistry	2005	MIT Professor of Chemistry
Edwin M. McMillan		Chemistry	1951	Staff, MIT Radiation Laboratory 1940-41 (deceased)
Charles J. Pedersen		Chemistry	1987	MIT S.M. 1927 (deceased)
Mario J. Molina		Chemistry	1995	MIT Institute Professor, Earth, Atmospheric and Planetary Sciences/Chemistry, 1989-2004
Robert Burns Woodward		Chemistry	1965	MIT S.B. 1936 (deceased)

14. Let's do a little more styling of the properties of the items in our datafile. This code will create a 'lens'- it provides styling information to specify how we would like each nobel winner's information presented. Add the following code right beneath the

```
<div ex:role="viewPanel"></div>:
```

```
<table ex:role="lens" class="nobelist">
<tr>
<td><img ex:src-content=".imageURL" /></td>
<td><div ex:content=".label" class="name"></div>
<div><span ex:content=".discipline"
class="discipline"></span>,                    <span
ex:content=".nobel-year" class="year"></span></div>
<div ex:if-exists=".co-winner" class="co-winners">Co-
winners:                    <span ex:content=".co-
winner"></span></div>
<div ex:content=".relationship-detail"
class="relationship"></div>            </td>
</tr>    </table>
```

Can you see what has happened?? Let's make things even more 'pretty'.

MIT-Related Nobel Prize Winners

TABLE • TILES

63 Nobelists

sorted by: discipline and nobel-year; then by... • ☑ grouped as sorted

Chemistry (12)

1951 (1)

1.  Edwin M. McMillan
Chemistry, 1951
Staff, MIT Radiation Laboratory 1940-41 (deceased)

1965 (1)

1.  Robert Burns Woodward
Chemistry, 1965
MIT S.B. 1936 (deceased)

1966 (1)

1.  Robert S. Mulliken
Chemistry, 1966
MIT S.B. 1917 (deceased)

1973 (1)

1.  Geoffrey Wilkinson
Chemistry, 1973
MIT research associate, 1950 (deceased)

15. Change the styles attached to the display elements by inserting the following within the <Style> tags:

```
<style>
        body {
            margin: 1in;
            font-family: "Helvetica","Arial", "Lucida
Grande","Tahoma",sans-serif;
            background-color: #F7F8E0;
            background-image:url('nobel-prize2.png');
            background-repeat:no-repeat;
        }

        footer {
            margin: 1in;
            font-family: "Helvetica","Arial", "Lucida
Grande","Tahoma",sans-serif;
            background-color: #FFFFFF;
        }
        table.nobelist {
            border:     1px solid #ddd;
            padding:    0.5em;
        }
        div.name {
            font-weight: bold;
            font-size:   120%;
        }
        .discipline {
        }
        .year {
```

```
            font-style:  italic;
        }
        .relationship {
            color:  #888;
        }
        .co-winners {
        }
    </style>
```

16. Reload the page in your browser and note that you have now provided a much more visually appealing display and suddenly we see faces!

Taking a quick pause.
We have accomplished some rather significant tasks so far.

1. We have taken a datafile and created a website that displays that data;
2. We have added means for the user to search, sort and filter the data;
3. We have added a new view to that website so that a user can choose different means to view the data;
4. We have started to style the textual presentation.

17. Now let's get our data straight before going further Open the data file 'nobelists.js' for editing in your text editor. There are two problems

18. Co-Winners of Nobel Prizes are not treated to the same information display as winners. After the first curly bracket and before the "items" tag, insert the following:

```
properties: {
            "co-winner" : {
                valueType: "item"
            }
        },
```

19. Save the data file.

20. Reload the page in your browser and note that there are now links to additional nobel prize winners when prizes have been shared.

21. Fix the grammar of pluralised Nobelist (s) by inserting the following code in the data file prior to the properties:

```
types: {
    "Nobelist" : {
        pluralLabel: "Nobelists"
    }
},
```

Exercise 2 : Adding Time to your Exhibit

22. Add a timeline view to your Exhibit by adding the following code into the <head> of your Exhibit html file:

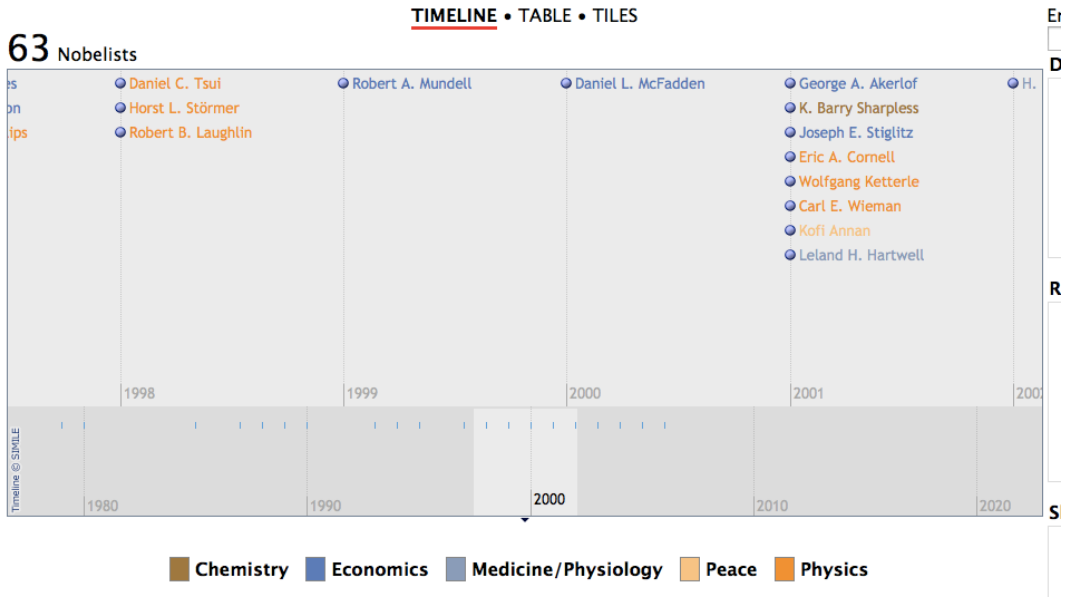
```
<script src="http://api.simile-
widgets.org/exhibit/2.2.0/extensions/time/time-
extension.js"
          type="text/javascript"></script>
```

23. Add the view panel to your exhibit with the following code before the view that is already there...i.e before the line

```
"<div ex:role="view" ex:orders=".discipline, .nobel-
year">":

<div ex:role="view"
    ex:viewClass="Timeline"
    ex:start=".nobel-year"
    ex:colorKey=".discipline">
</div>
```

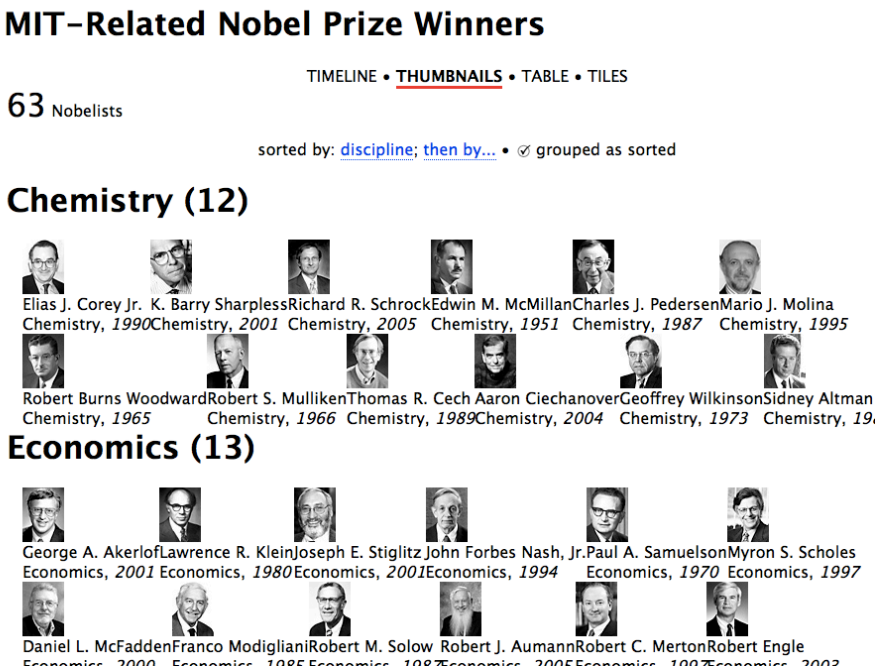
24. Save the file and reload the browser page and you should now see two options to view the data. It's that easy. You can add different views with very simple alterations to the code.



25. Let's add a thumbnail view to the data by inserting another view much like the timeline. Insert the following code before the view as you did above:

```
<div ex:role="view"
     ex:viewClass="Thumbnail"
     ex:showAll="true"
     ex:orders=".discipline"
     ex:possibleOrders=".label, .last-name,
.discipline, .relationship, .shared, .deceased, .nobel-
year">
        <div ex:role="exhibit-lens" class="nobelist"
style="display: none;">
         <img ex:src-content=".imageURL" />
         <div><span ex:content=".label"></span></div>
         <div><span ex:content=".discipline"
class="discipline"></span>,
         <span ex:content=".nobel-year"
class="year"></span></div></div></div>
```

26. Save and reload the page and now you have three very distinct options to view your data and share it with the general public.



Exercise 3 : Adding Geospatial Data

27. As a final step, let's add a geospatial dimension to our data. Add the following line to the html file to allow for map functionality:

Add below the prior script references:

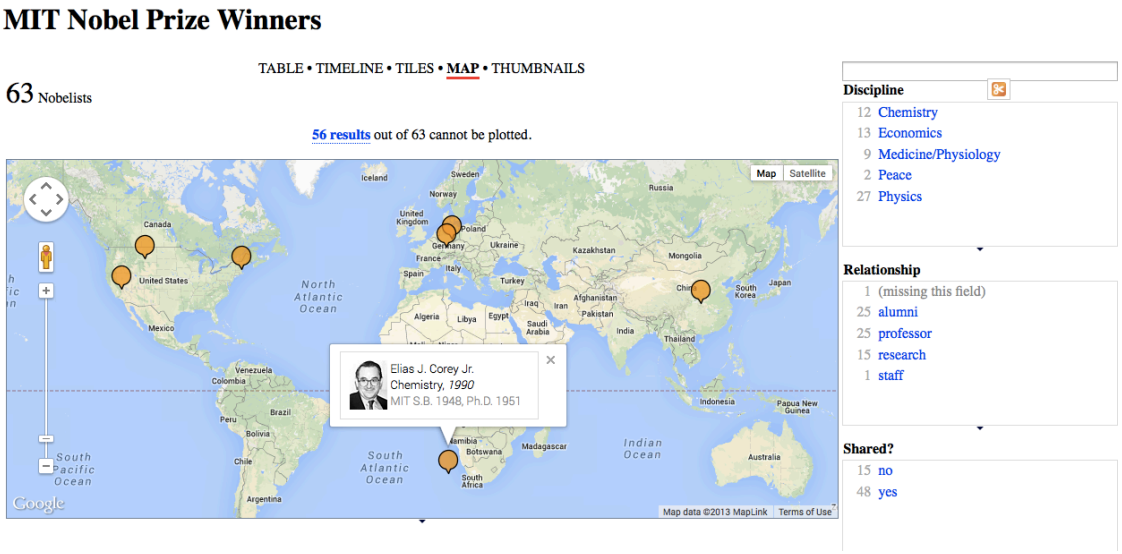
```
<script src="http://api.simile-
widgets.org/exhibit/2.2.0/extensions/map/map-
extension.js"></script>
```

And then add the following view code below the line "ex:sortAscending="false"> ":

```
 <div ex:role="view" ex:label="Birthplace"
      ex:viewClass="Map"
      ex:latlng=".birthplace"
      ex:shape="square"
      ex:shapeWidth="30"
      ex:shapeHeight="25"
      ex:mapHeight="600">
            </div>
```

28. Save your page and reload in your browser and we should now

have four interesting ways of viewing our data.



The final version can be viewed at:

`http://digitalnomad.ie/exhibit/step5/index.html`