

# CONSTRUCT INTERFACE

Design guidelines:

1. Avoid the "toolbox" and "settings" panels as much as is possible in favor of direct interaction through the visual interface and keyboard entry.
2. Emphasize an immersive experience whether drawing or typing data. Additional interface elements indicating time, navigation, layout options, etc. should be "peripheral" meaning not part of the primary view and not distracting.
3. Transitions should be fluid -- efficient, but not unnaturally quick and not annoyingly slow. Timing must be just right.
4. The interface is an instrument. We can assume that mastering it should require some expertise and yet the experience of using it should be personal. If we create multiple ways of entering information, for example, without complicating things, it allows people to use the interface more expressively. Choosing a mode of interaction that is most natural.

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The layout for the interface is based on Excellence Networks:

- The graph interactive view takes the full screen above the fold.
- The tabular view of the data extends vertically below the fold
- Visual cues inform the graph interaction space and provide navigation

<http://www.excellence-networks.net/>

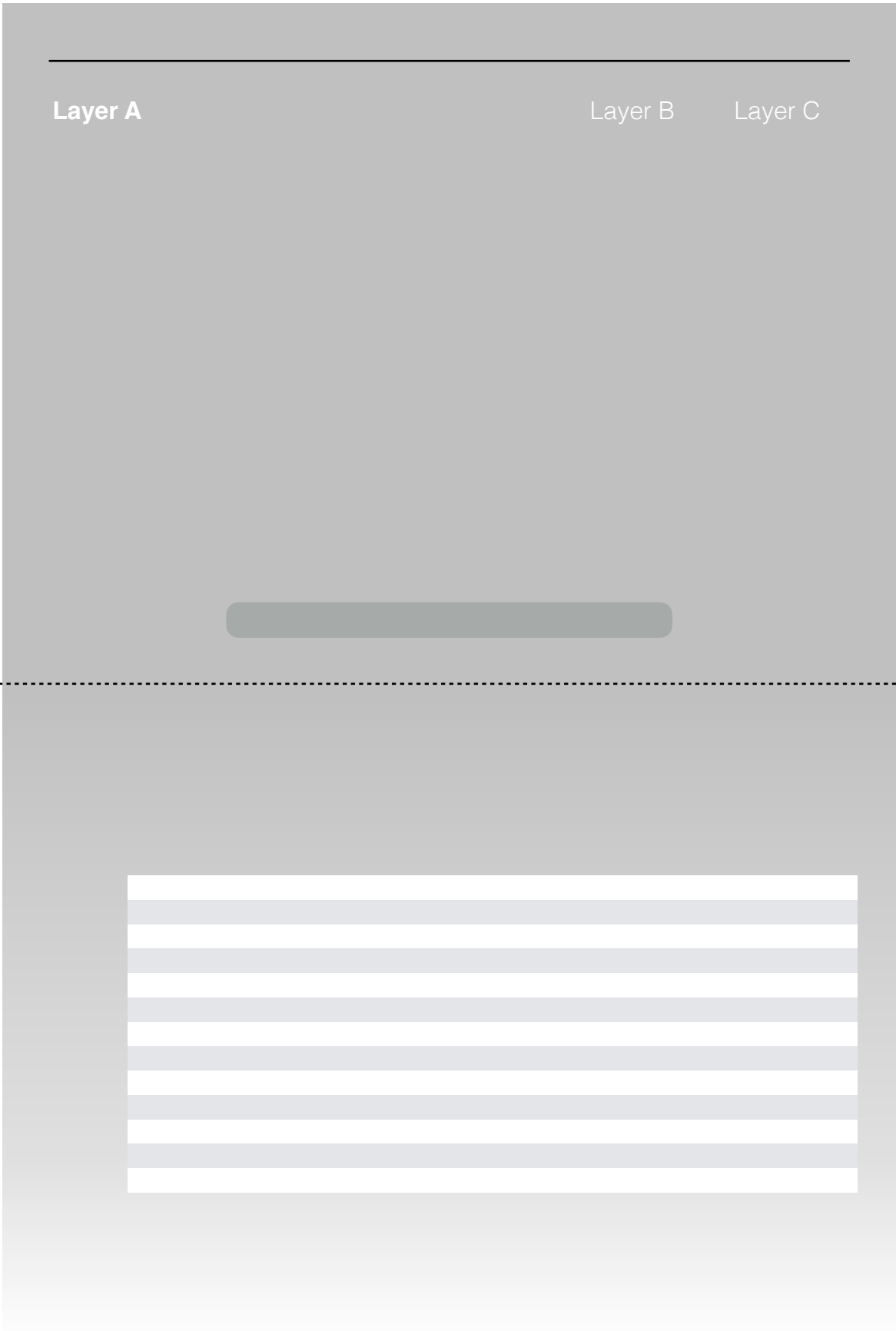
timeline

Layers can be moved to bring preferred node type to the front

Add nodes directly to the canvas with a double-click

Add nodes to the canvas by typing in the add-node-field (based on the Rhizi model)

Tabular view below the fold



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## Add nodes and links

There are multiple ways to get data in:

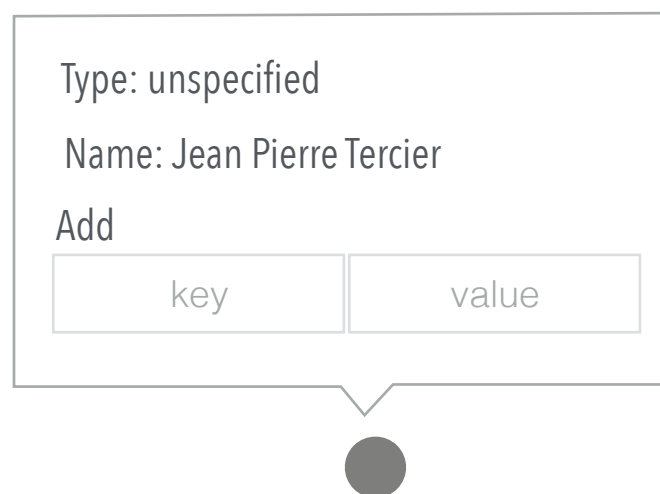
1. Directly through the graphical view
2. Through the expanding add-node-field (on the model of Rhizi)
3. Typing into the tabular view
4. Typing RDF on the model of Snapper (this will come later)

## 1. Directly through the graphical view

Double-click on the canvas to add a node and type a value/label. The node type can remain undefined. Until more than one node type is defined, the layer can remain unspecified.



Double-click the node to open a badge to enter additional key-value pairs or to edit the node type or an existing value.



Click to select a node and hold the <SHIFT> key to create a link with another node. The link can remain unspecified until it is selected. Double-click the link to add properties.



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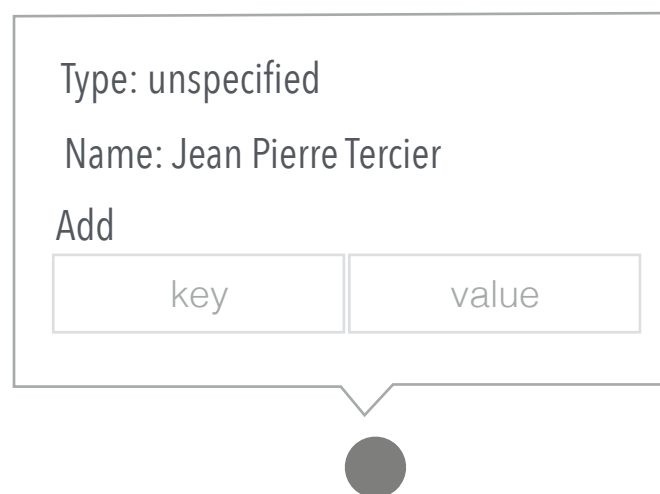
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Add nodes and links

## 2. Through the expanding add-node-field

The field expands out from the center if the string is long or if the entry is not a single node but a relationship.  
Node-type is defined at the layer.

Type a person name and verify

<TAB>

<TAB>

<RETURN>

There is a live-search for the entity against the sources. Use arrow keys to select the value and use return to confirm it.

<RETURN>

A single TAB gives the opportunity to add a link which can be skipped. The second tab offers the opportunity to enter another string which will be the name for the linked node. By default, we assume the same node type as the first one typed.

<TAB>

<TAB>

<RETURN>

Broglie, Charles-François de

*knows*

Jean Pierre Tercier

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## Layers

Layers help to manage the complexity of the view by showing one node type at a time while giving a peripheral awareness of how those nodes are linked through other nodes.

Layers are generated whenever a new node-type is added to the graph view, even indirectly. For example, if we add Jean-Pierre Tercier to a “People” layer and also add his place of birth as a verified place, a “Places” layer will appear with a node for his place of birth. Dragging a layer label next to the primary layer will make the secondary layer nodes visible but more faint than the primary.

We will need a way to manage the the link types that are shown when two layers are brought together.

PEOPLE

PLACES

THINGS



Jean Pierre Tercier

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Paris

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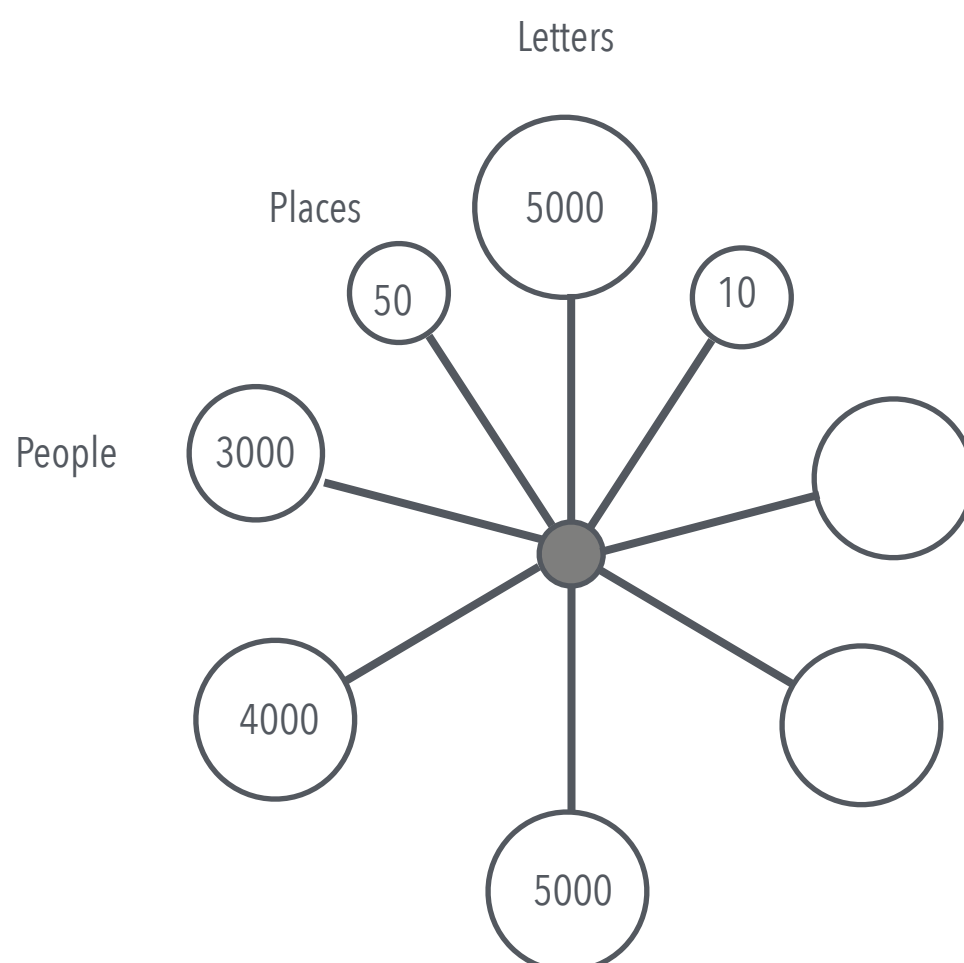


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## Enrich/Extend

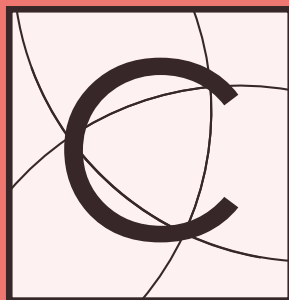
Enrich/Extend is its own component, but also operates in a limited way within the construct interface. A keyboard action opens a new view that shows all of the potential links that can enrich an existing node based on what is available from the local data and from configured sources.

In the example below, if Jean-Pierre Tercier is shown to have 50 potential places associated with him, we can double-click to expand that places node to see more detail. In expanding, we also re-orient the graph around places. See this technique in Excellence networks.



HUMANITIES + DESIGN

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