

Instruction of making Construction

Description: A Construction explains the conceptual idea behind a visualization design and how a visualization is encoding data. The goal of the construction, on the other side, are twofold: **(a)** to provide a procedural explanation of a visualization design, **(b)** to deliver a blue-print for how to explain the visualization to a larger audience.

Step 1

Find or make a simple data set

Step 2

Show one change at a time: for each explanation, create a new graphic

Examples:



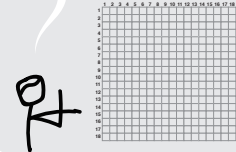
Adjacency Matrix

Construction

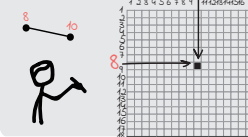
To build an adjacency matrix, we create a row for every node in our network...



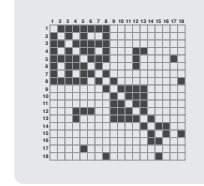
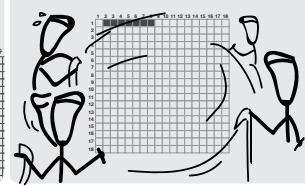
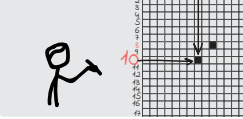
as well as one column.



If nodes are connected, we mark the corresponding cell.

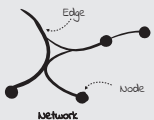


Since the adjacency matrix is symmetric, we mark both cells.

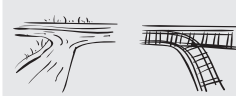


Confluence Graph

Construction

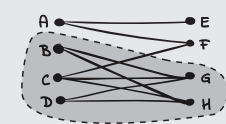


It's called confluent, because the edges flow together smoothly like when two rivers combine...

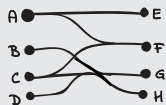


... or like two railway tracks.

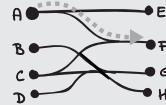
Here, we're looking for edges that can flow together if they have the same target node!



Unlike other bundling techniques, confluent drawings are unambiguous because they do not bundle edges simply by spatial proximity.

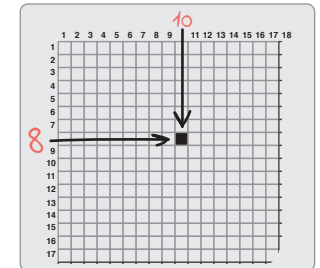
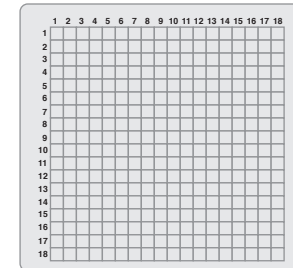


To see whether A connects to F, you simply follow the edge the way you would follow a railway.



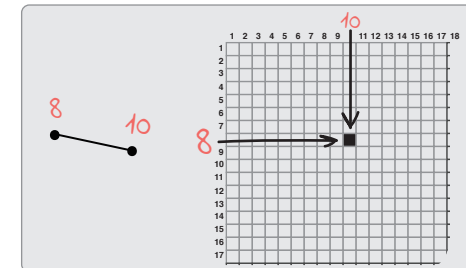
Design Guidelines:

Show one change per panel



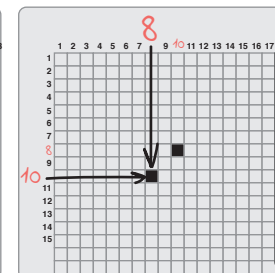
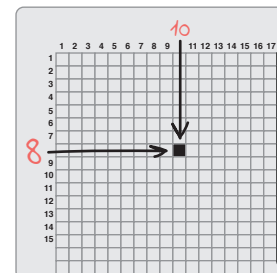
Show how this visualization relates to its well-known relative.

Node-link diagram



Adjacency Matrix

Show one to two data examples of how they are mapped in the visualization.



Omit too many repeated actions.

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