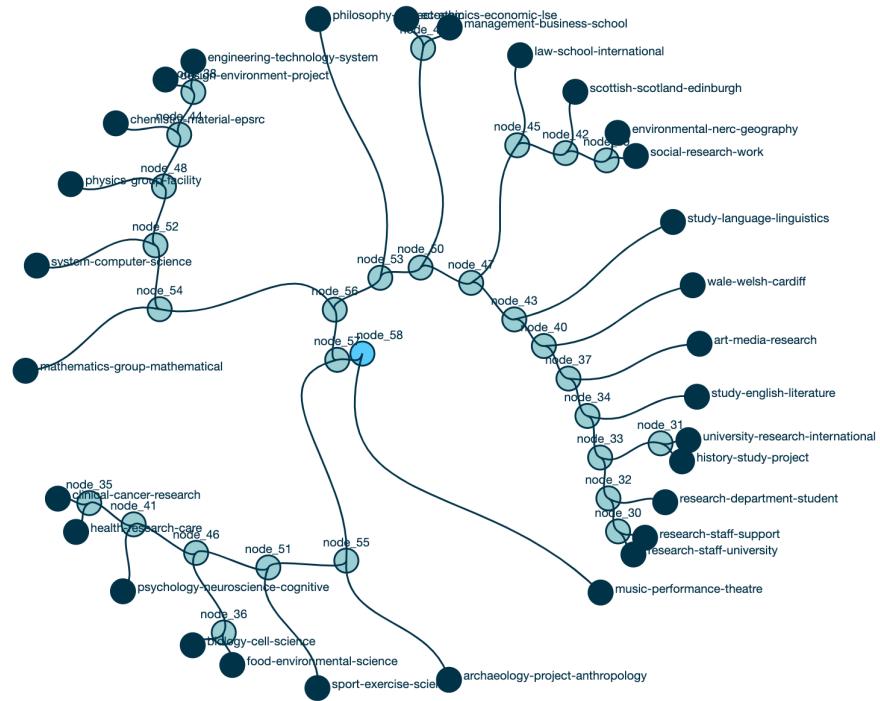


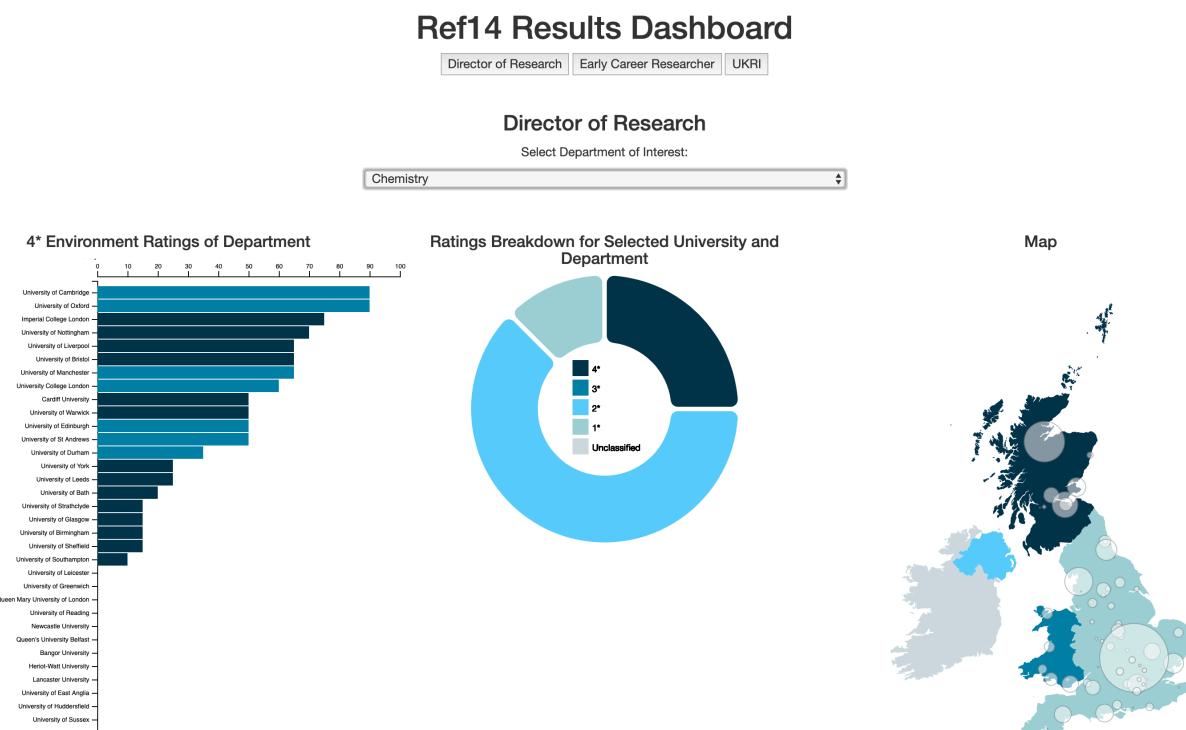
# D3: Requirements Evidence

## **G1: Use of Gitlab (See commit History document)**

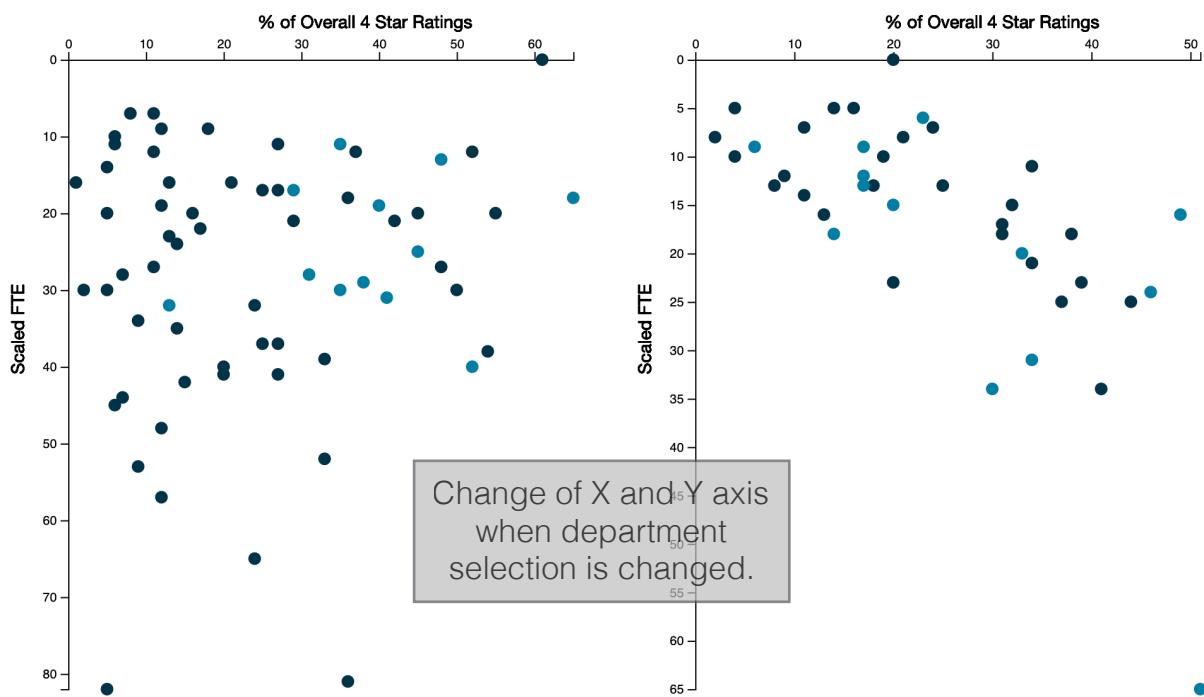
## G2: Use of D3 hierarchical display to illustrate agglomerative clustering of topic-to-topic similarity



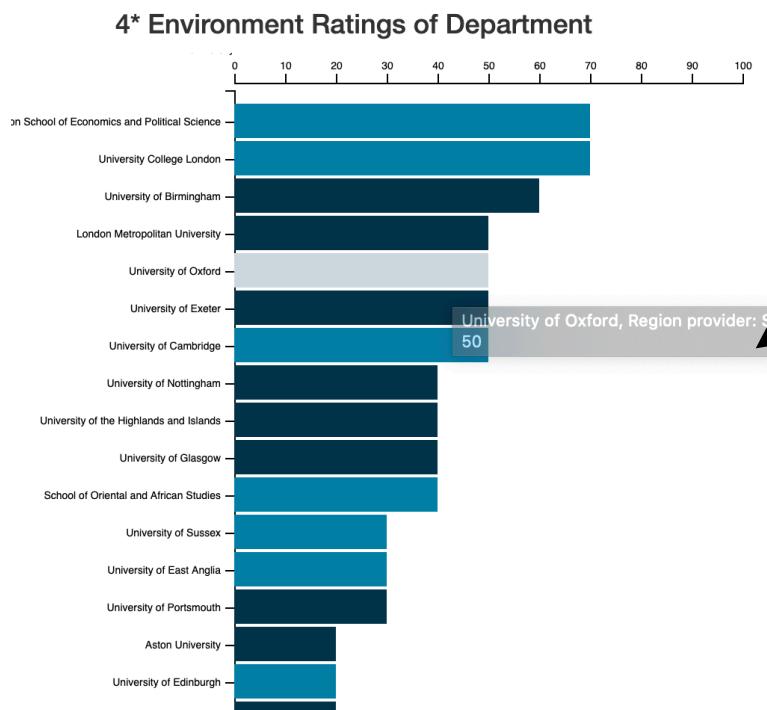
## R1: Use of three different D3 layouts in a single dashboard



## R2: Use of automatic scaling of all axes in a single layout during data update.



## R3: Use of datum highlighting in which hovering over a datum provides additional information via a tooltip

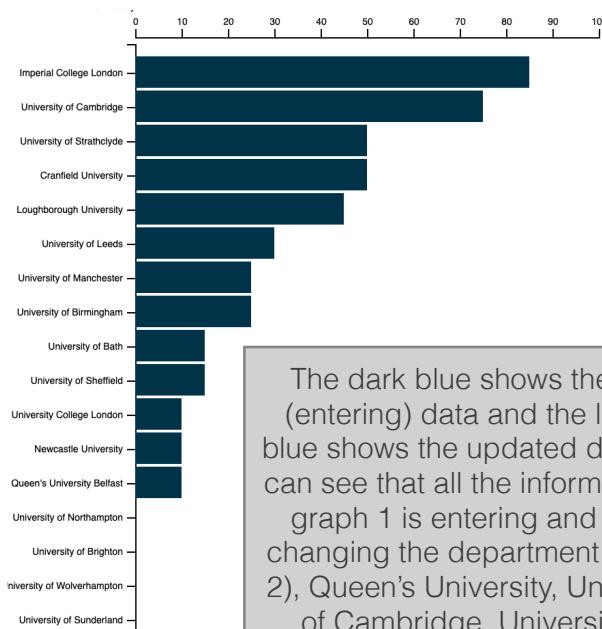


Ratings

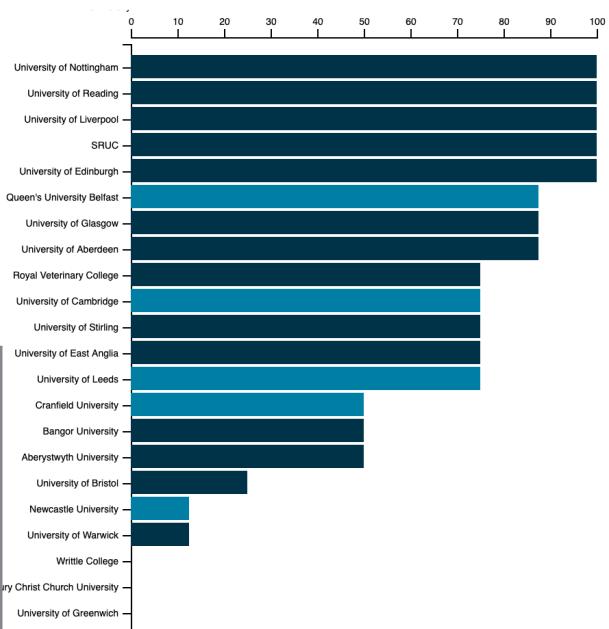
Hovering over university displays a tooltip with extra information giving the region provider.

## R4: Use of D3 transitions to highlight new (entering) data and R5: Use of D3 transitions to highlight updating data

Graph 1

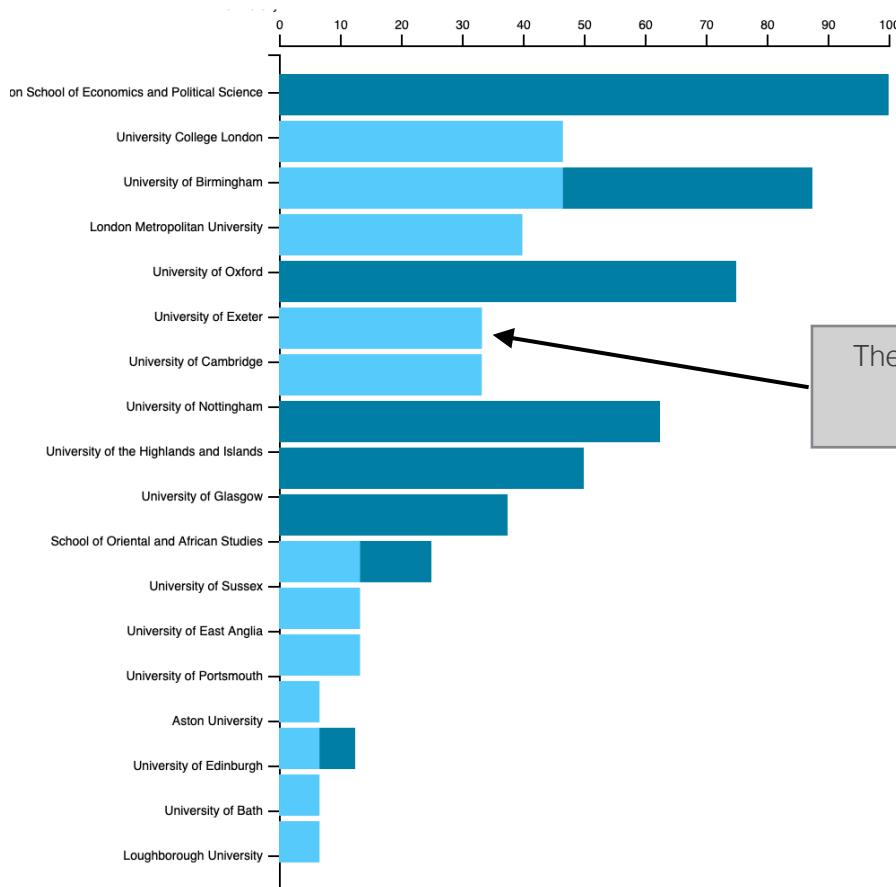


Graph 2



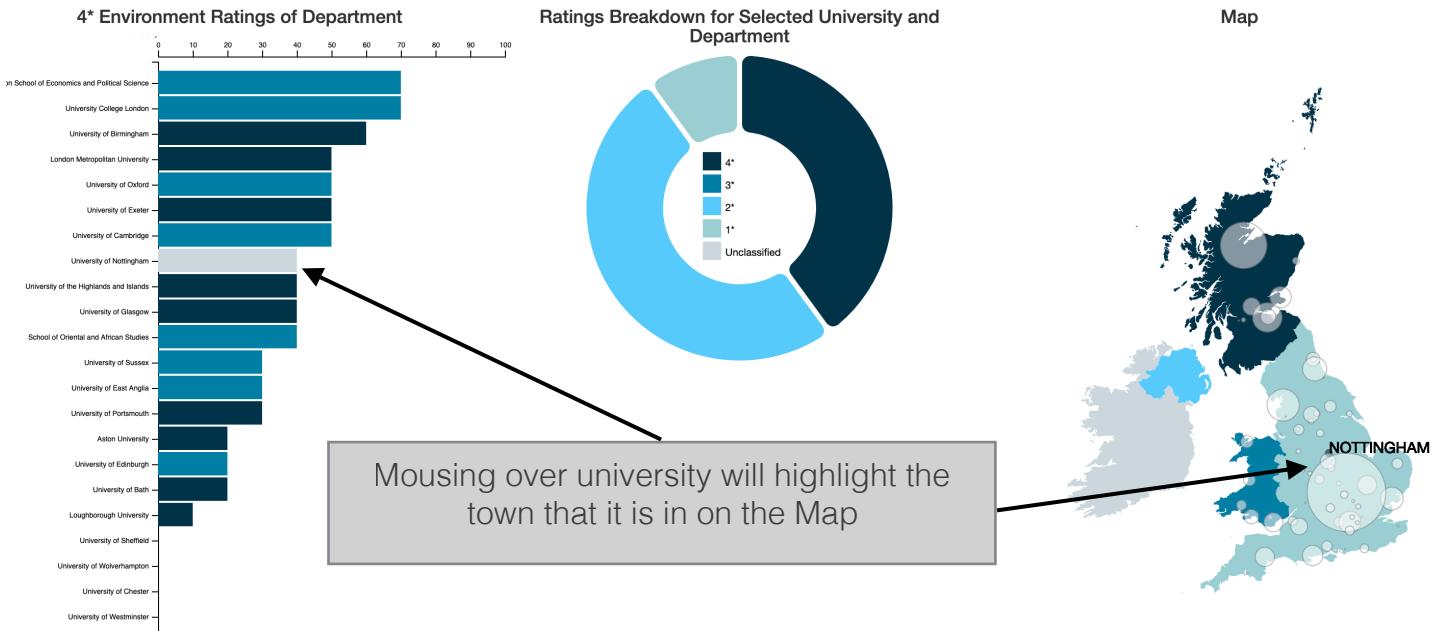
The dark blue shows the new (entering) data and the lighter blue shows the updated data. We can see that all the information in graph 1 is entering and upon changing the department (graph 2), Queen's University, University of Cambridge, University of Leeds, Cranfield and Newcastle University are all updated.

## R6: Use of D3 transitions to highlight exiting data

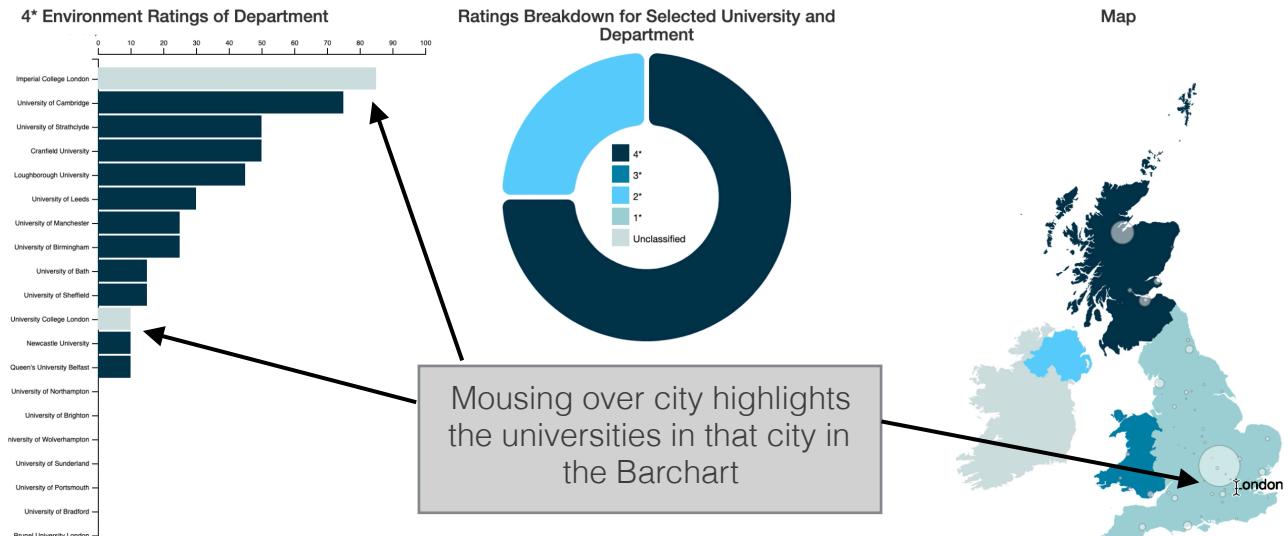


The lighter blue shows the data exiting

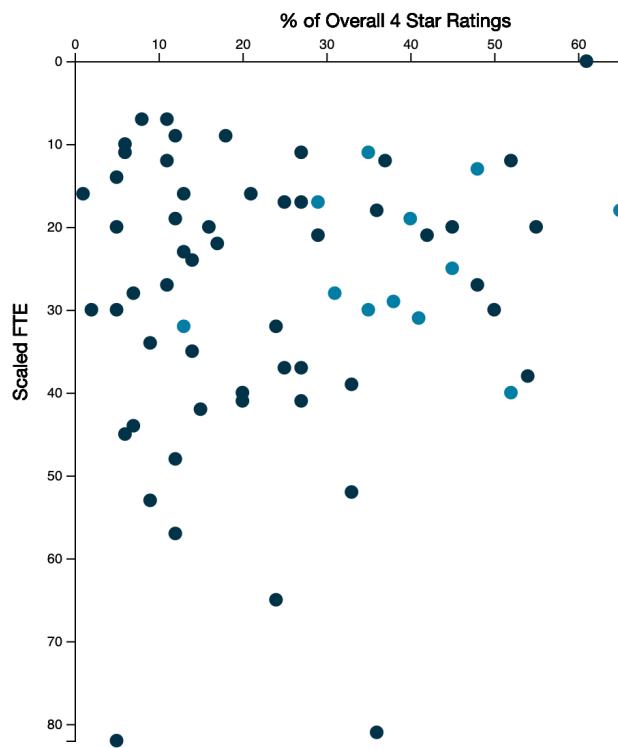
**R7: Use of cross-layout brushing in which moussing over a data point in one chart highlights associated data in another chart**



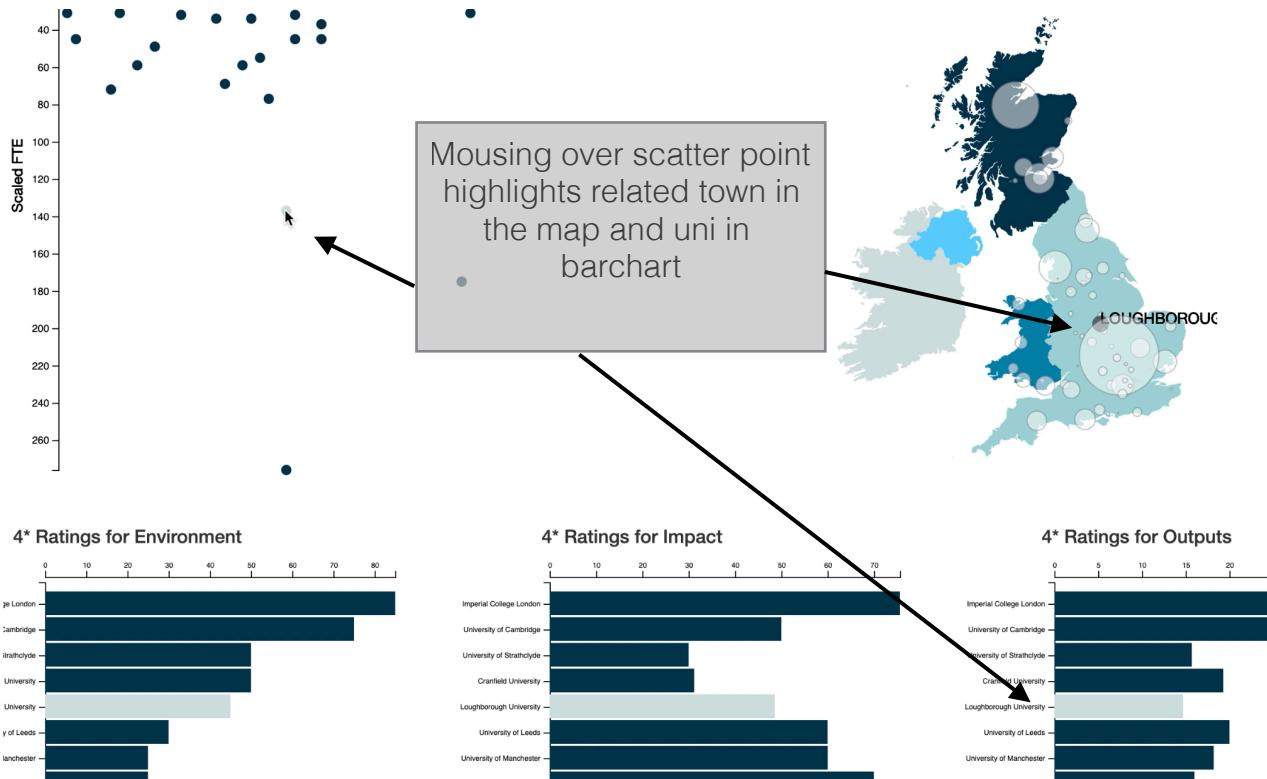
**R8: Use of cross-layout brushing in which moussing over one data point in one chart highlights multiple associated data points in another chart. Note: you must use a different combination of layouts than the ones provided in lab examples.**

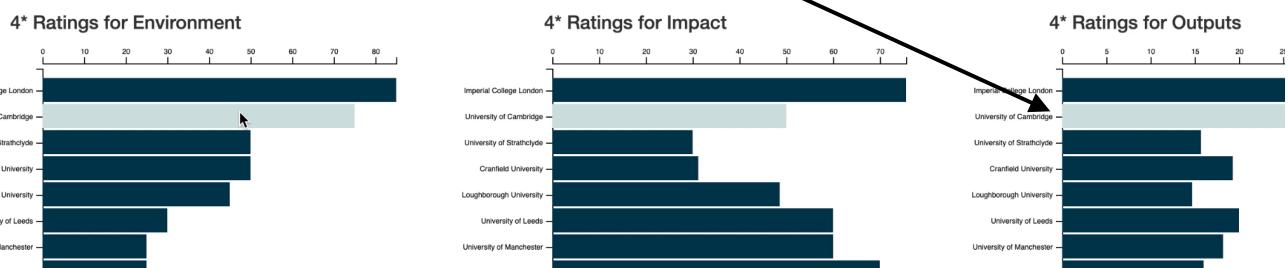
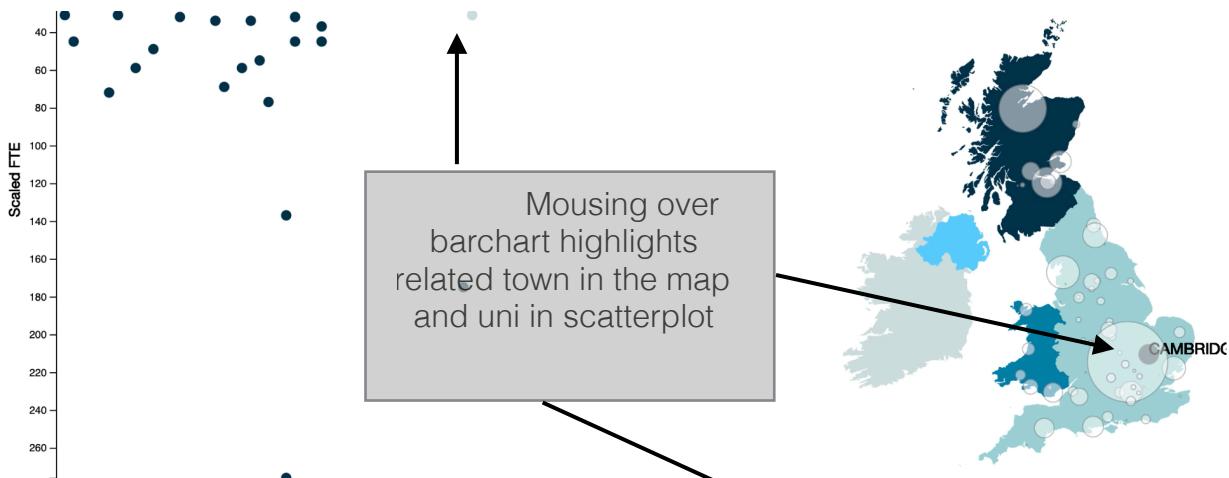
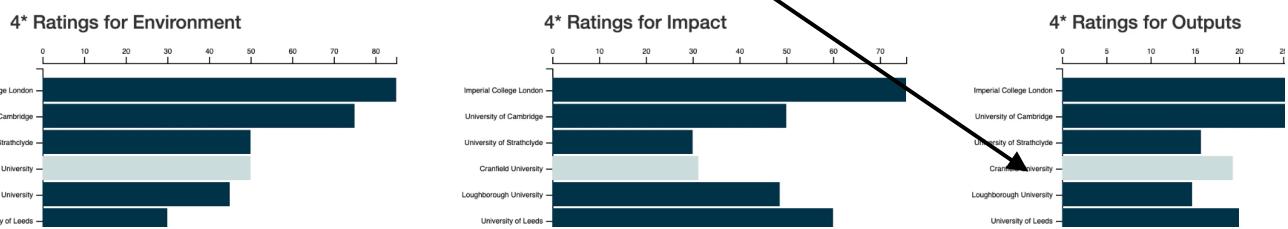
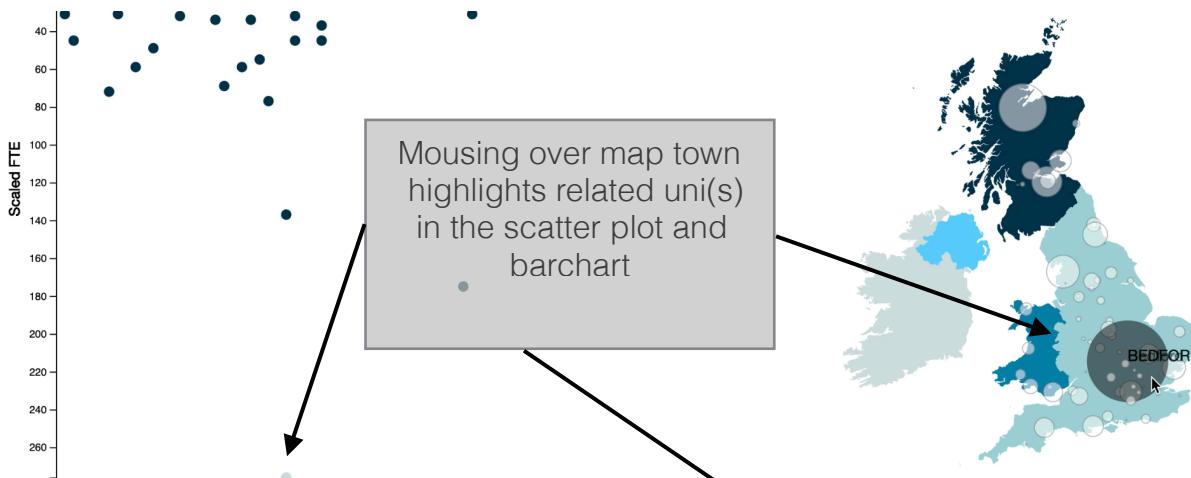


## R10: Use of a scatter plot, a stacked barchart or, a linechart

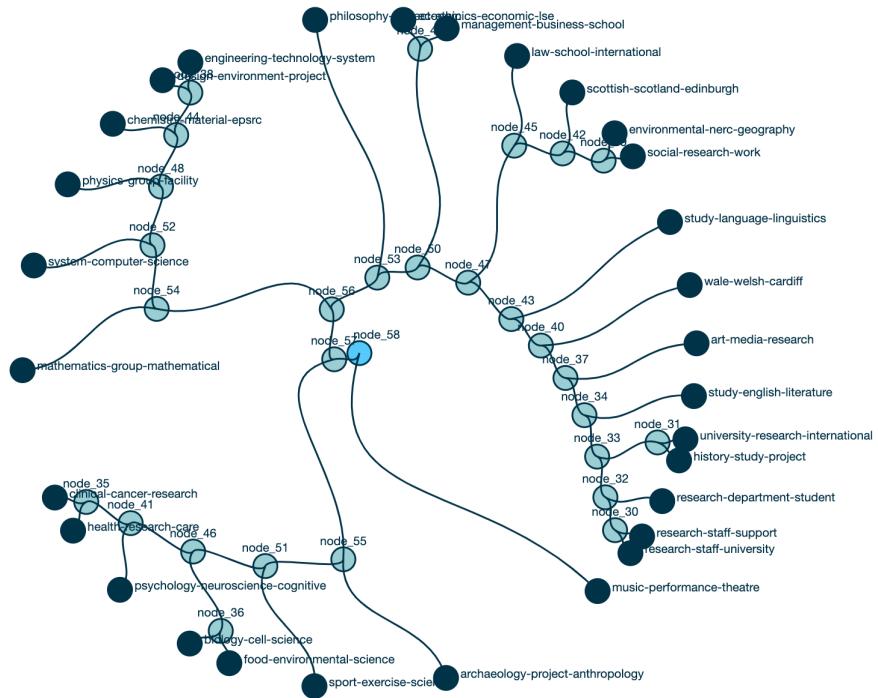


## R11: Use of bidirectional interaction between three charts

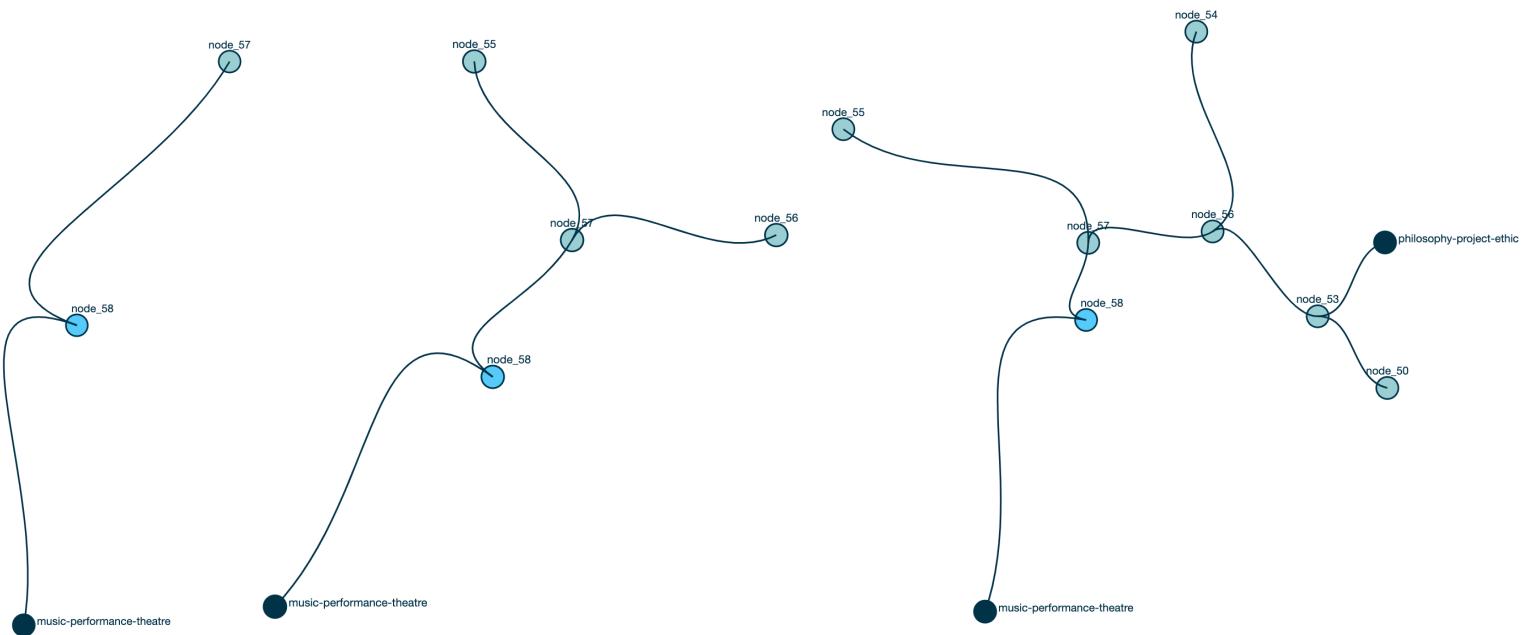




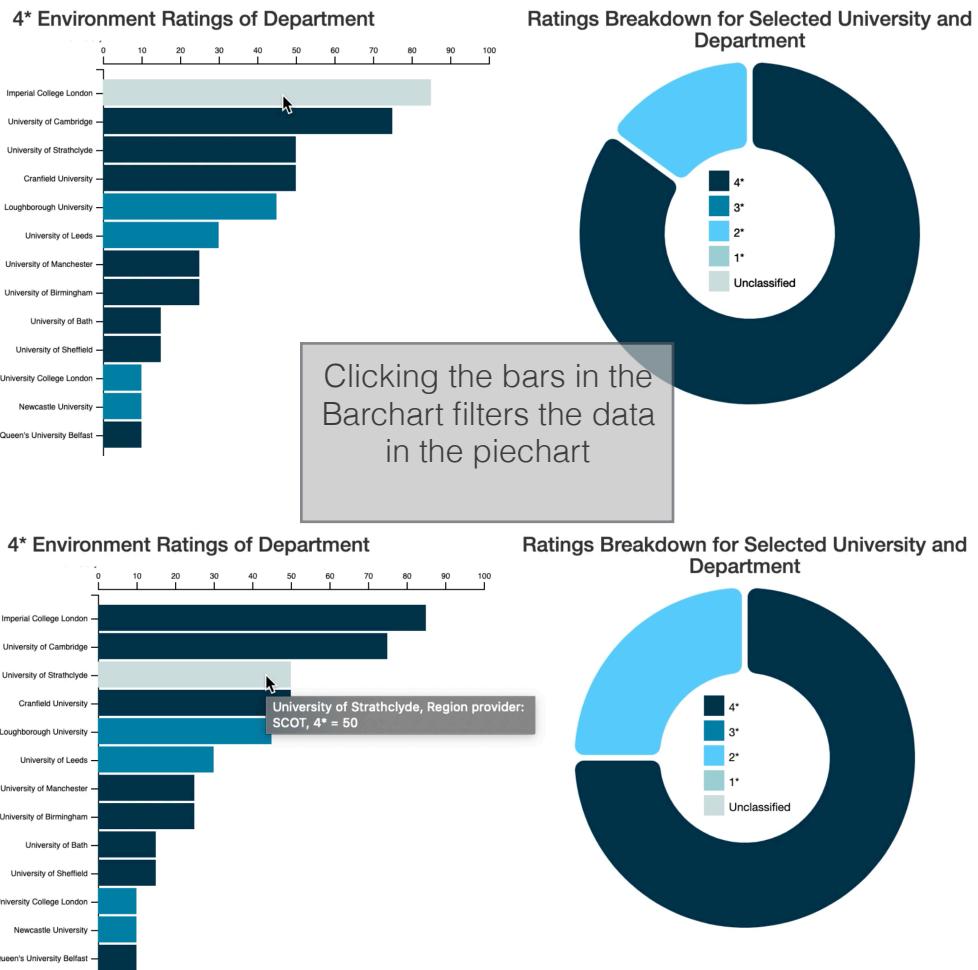
**R13: Use D3 hierarchical layout e.g. cluster, pack, partition, treemap, sunburst, or bundle, but a not tree layout**



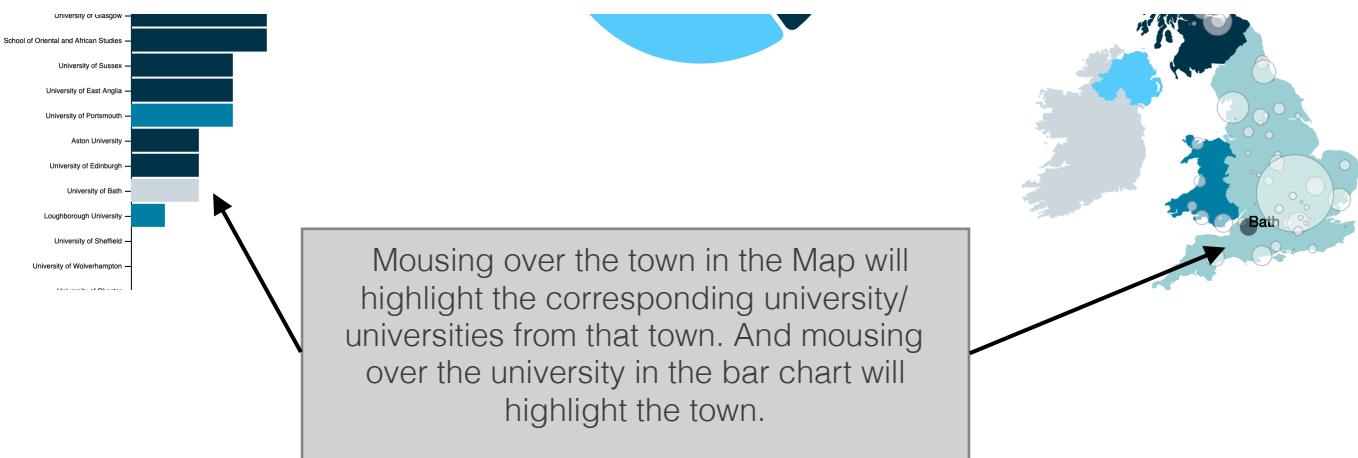
**R14: Use of selective reveal in a hierarchical layout display (e.g. revealing/concealing lower nodes in a dendrogram)**



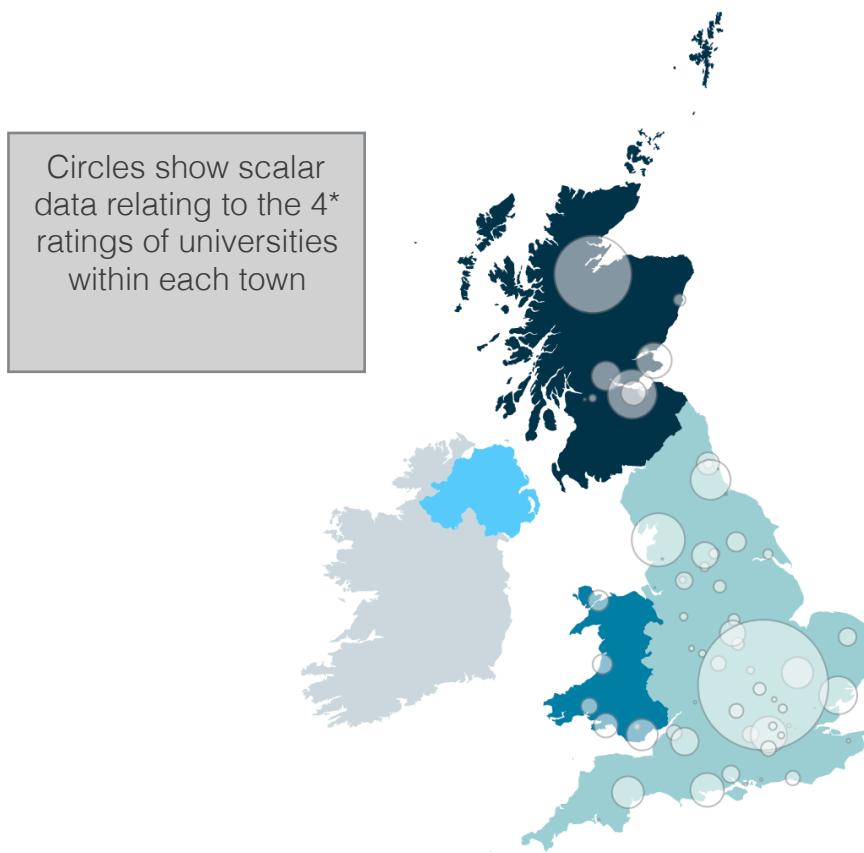
**R15: Faceted selection interaction between two layouts (in which mouseover or click in one layout results in data being filtered in a second layout).**



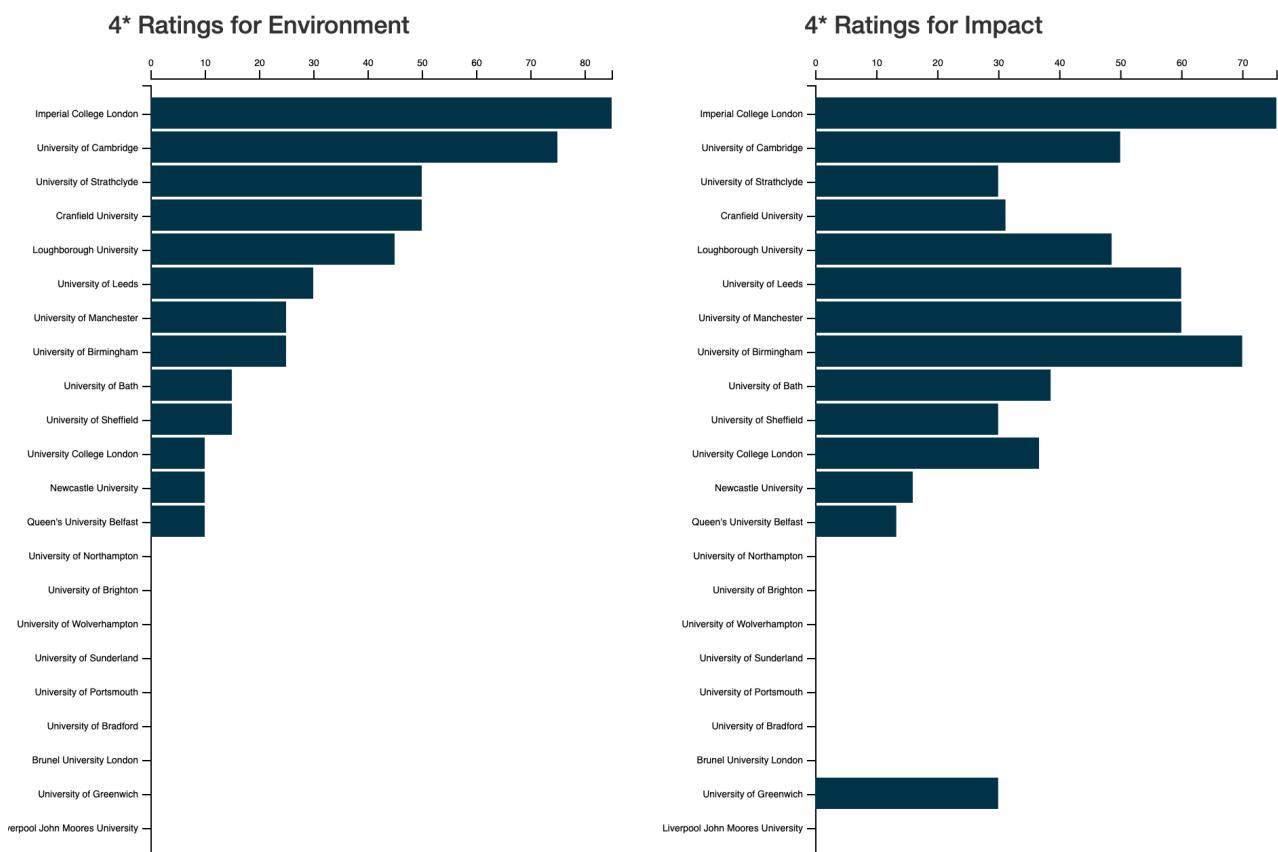
**R16: Use of a map layout that has interaction with another layout.**

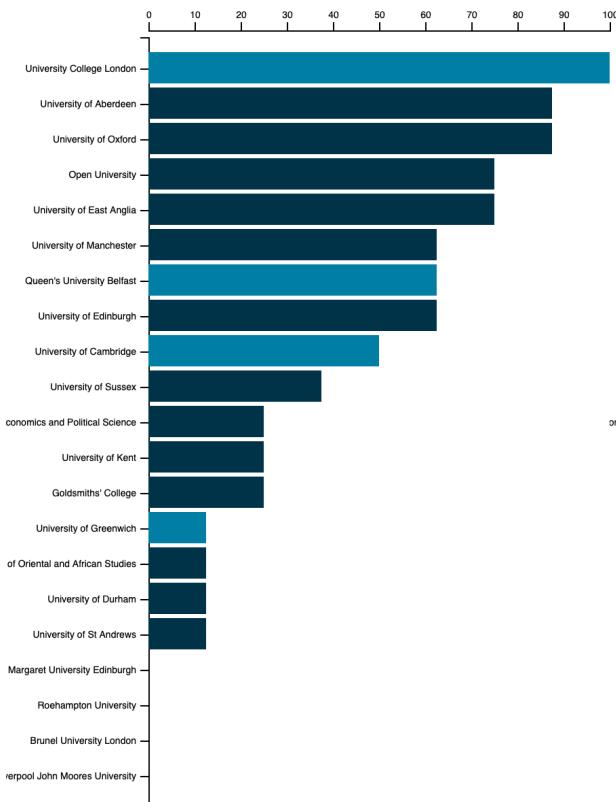


## R17: Use of scalar data on a map



## R12: Use of automatic scaling of all axes of a further two layouts during data update.



**4\* Ratings for Environment****4\* Ratings for Impact**