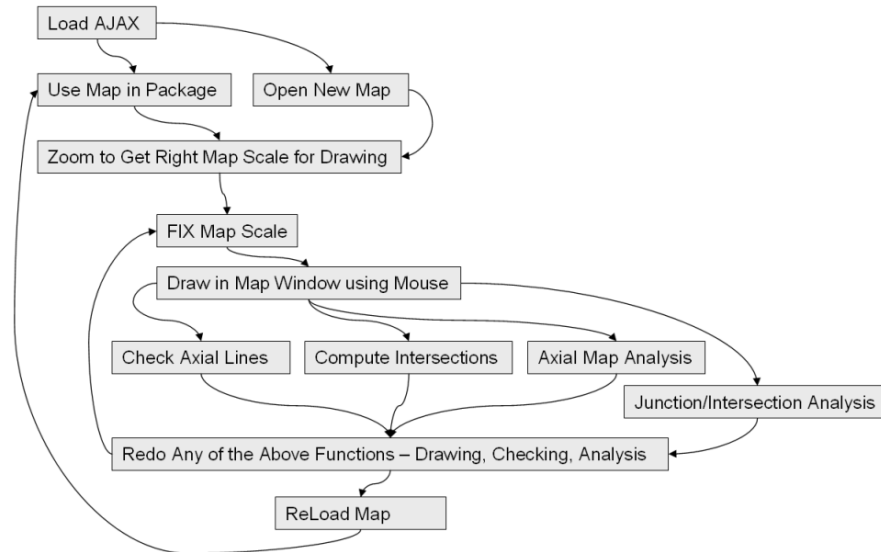
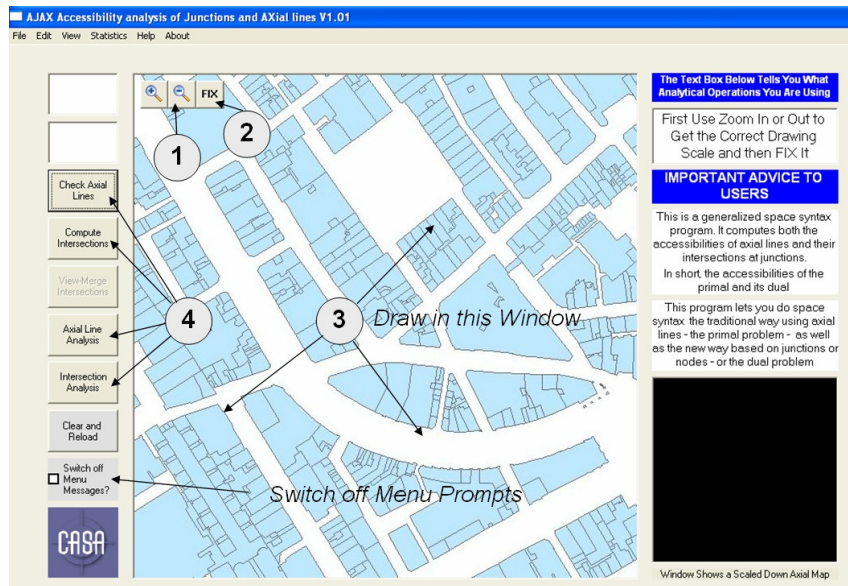


# AJAX: An Example<sup>†</sup>

There are four stages to using **AJAX** which should be used according the following sequence: first, load the software, second, zoom in or out of the map to get it to the right scale on the screen so you can draw the axial map and then fix the scale so you can draw, third, draw using the mouse, and last check the lines, fix the intersections or run the axial graph or the junction graph analysis to get integration or accessibility values for lines or junctions. We elaborate these stages in the following flow chart.



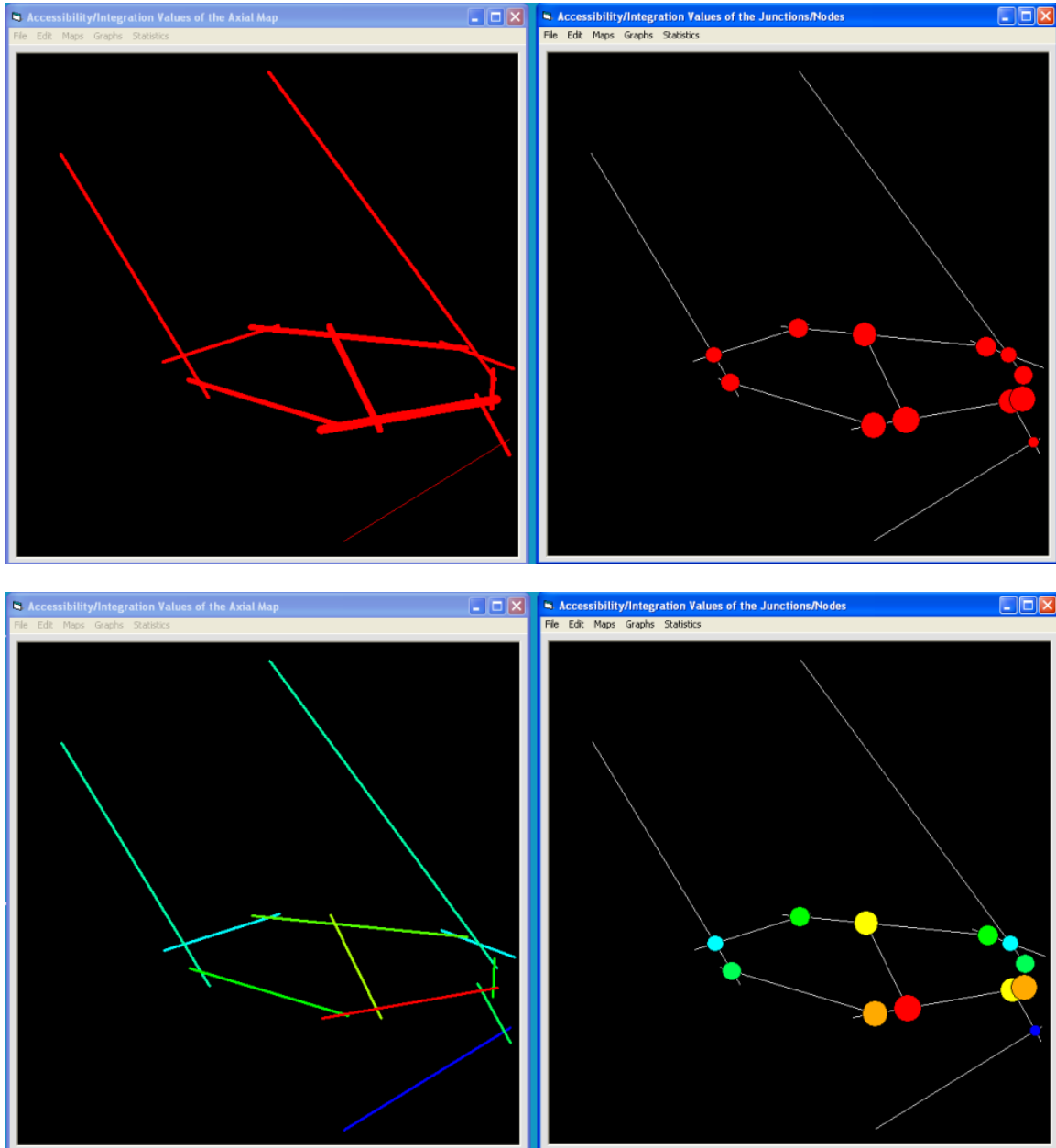
In terms of the package in the main window, this means that a typical user would go through the following stages where we now show the stages on the main screen which appears when the software is loaded:



<sup>†</sup> This is for Version 1.01, June 9, 2005: see <http://www.casa.ucl.ac.uk/ajax/>

A key feature of the software is that when you engage in the analysis of the Axial Lines/Axial Map, another window opens which gives you the accessibility or integration values by thickness of line or in space syntax colours. The same happens – another window opens – for the dual analysis on the intersections or junctions. These windows are opened when you activate either of the last two functions in 4 above.

The windows look like this:

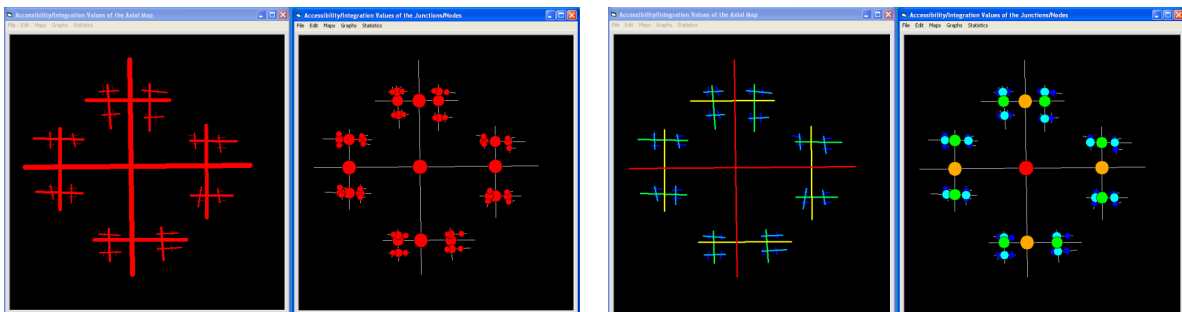
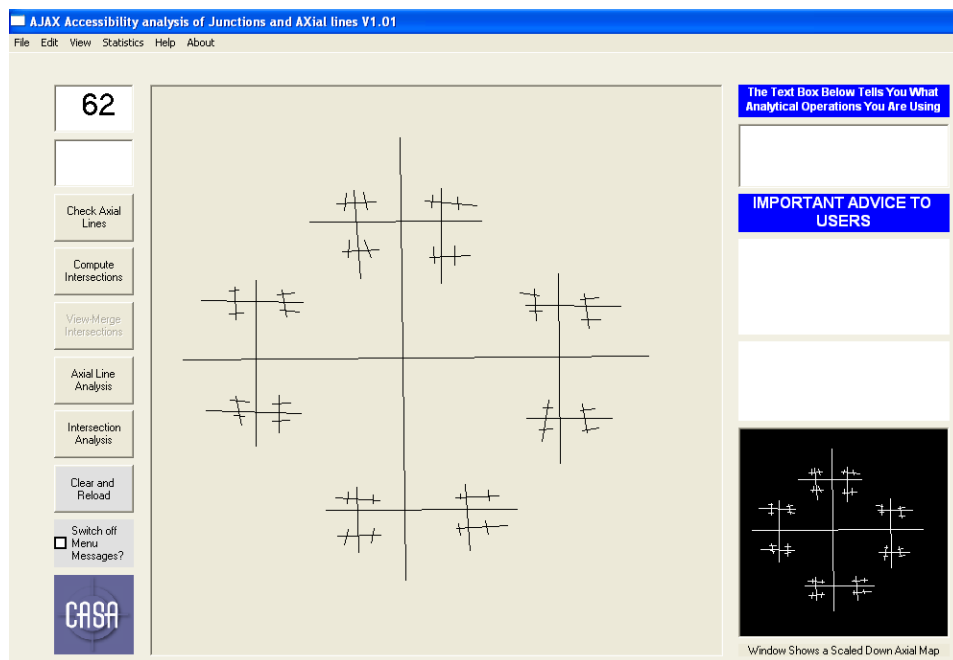


The lines and the circles in the first set are proportional to integration/accessibility values and in the second set, we use space syntax colours values. Note that you can save all these values as text files. As yet you have to remember what order you digitized the lines in as there is no key map for these – it will come in a later version. You can also save the data from the main screen which gives the axial lines, and junctions and their locations in x-y coordinate form. In essence whatever data you draw in, you can get out as files to be input elsewhere in spreadsheets or GIS.

You can also save the maps as jpegs and there is some rudimentary statistical analysis of the axial map as one function from the main screen. Snapping and merging the lines is not yet activated.

Finally, there are two very nice features of the software and the way one is able to draw axial lines.

- You can update the axial map and show how the accessibility/ integration scores change as you add lines or junctions. This can be used for design purposes as in sketch planning.
- You can also clear the screen and use a blank map to generate some idealized designs. Here is an example of generalized space syntax on a fractal – i.e. a tree like shape drawn on the blank screen



There will be a lot more in the next version of the package which will contain zooming and panning as one draws the axial map, snapping and merging lines and junctions to get integrity in removing redundant lines and nodes, analysis of the graphs behind the axial lines and behind the junctions, depth-maps, and statistics of the graphs in terms of connectivity.

Michael Batty, UCL, 9<sup>th</sup> June 2005, [mbatty@geog.ucl.ac.uk](mailto:mbatty@geog.ucl.ac.uk)