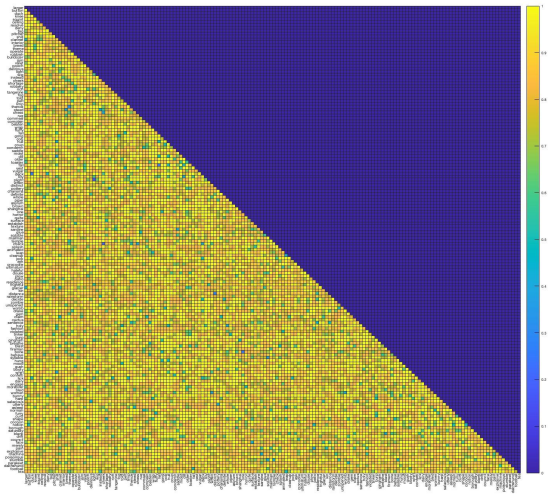
NTR_Orthogonalization_v15_multilistinput.m
Takes the final list(s) of worths that are minimally correlated and generates the distance matrices, correlational data, and parameters of each word.
Input: final word list (**wordinput_1.csv**) or multiple lists (i.e. wordlist.csv)
Output:

1. Distance matrices values as a structure array (allDistanceMatrices_x.mat)
    a. Each matrix is a field in the allMatrices structure array
2. Final word list parameters (allWordParameters_x.mat)
3. finalist_lists_Orthogonal_Corrs_iterations_12.csv
    a. Correlation data
4. finalist_lists_Orthogonal_WordIndex_iterations_12.csv
    a. Word index of final list

Distance matrix figures - NTR_Orthogonalization_DistanceMatrices.m
Uses the structure array saved of distance matrix values. This program generates the figures like the one below from the matrices generated in **NTR_Orthogonalization_v15** and saves it into Excel.
To run:

1. Load wordlistfinal.mat and allDistanceMatrices_1.mat (in folder)
2. Or run NTR_Orthogonalization_v15_multilistinput.m



Use this algorithm (DistanceMatrices.m) when generating many figures and saving to Excel.

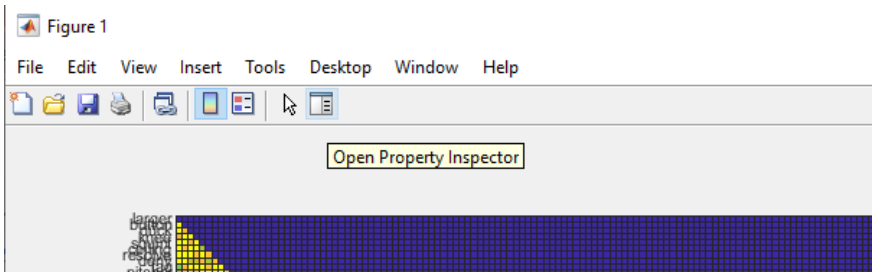
- Can eventually integrate it into multilistinput algorithm

To generate figures and edit on MATLAB **INDIVIDUALLY** (change letterTri to matrix of interest):

```
letterTriTrans = transpose(letterTri);
heatmap(letterTriTrans, 'Colormap', parula)
set(gca,'XData',wordlist, 'YData', wordlist)
```

To edit figure:

1. Click “Property Inspector” on top of Figure menu in MATLAB



2. Can edit font, title, colors, etc. here
3. On this figure menu, can also zoom into specific regions and export it as a separate file

Overall goal:

- Combine these two algorithms and make it so that **NTR_Orthogonalization_v15_multilistinput.m** can output a file of all the visualized distance matrix color figures
- Ensure that algorithms run with any list of words