To Do List

AC:

- Fix application of Binary2Depth function to GERT-generated 3-letter images.
- Make sure can display convex version of 3D letters too.
- Generate more letters for use with GERT (not just G,E,R,T)

MH:

- Tweak HolesCrowd_TEST.m to find best-looking depth multiplier for images

Find good “Depth multiplier” numbers for two different files:

- BigFatT.png
- BigT.png

```
 im = double(imread('BigFatT.png','png')); im =
double(imread('BigFatT.png','png'));
 im = mean(im,3);
 im = Binary2Depth_thin(~logical(im));
 %im = im/255;
 %im = ~im;
 im = round(im*2.5);
 im = mean(im,3);
 im = Binary2Depth_thin(~logical(im));
 %im = im/255;
 %im = ~im;
 %%%%%%
 im = round(im*2.5); %% MH tweak this number
 %%%%%%
```

Design notes

Great article for methods:

http://www.journalofvision.org/content/13/1/24

Visual angle of letters:

Boots CRT monitor is 36.5 cm wide. Comfortable sitting distance for AC is 50cm exactly, so use this as viewing distance. Currently, PTB whole-screen window is 1024 pixels wide, so 20.48 px/cm.

NOTE: this size is for use with the boots PC and monitor only! This pixel size is tiny on diego's monitor.

Strasburger & Malania used 4 deg. eccentricity targets

4 deg. at 50cm on the boots CRT monitor: 3.49cm = 71.47px ~ 71 px.

.5 deg at 50cm on boots CRT: .44cm = 9.01 ~ 9 px.

Can use stimulus width as the distance between flankers.

Plan: scale these numbers up, but keep the ratios.

First try: if boots CRT is 1024 px wide, can go up to almost 512 px eccentricity, 512/71 ~ 7. So let's scale up by 5 to be safe:

Place target at 71*5 ~ 350 px away from fixation cross (which should be at the center of the monitor)
Make targets 9*5 = 45 px tall and 45 pixels apart.

From:
https://wiki.anthonycate.org/ - **Visual Cognitive Neuroscience**

Permanent link:
https://wiki.anthonycate.org/doku.php?id=research:holes_crowding&rev=1412110254

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