Subject: Deviant Data
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Hi All,

In looking at both the source code and the matlab, I'm concluding that stimulusIndex is not relevant for Discrete (main task) trials. I think that only matters for Tuning runs, and Discrete (the main task) is not a Tuning run.

I found this matlab function:

```
function [Attn,Ori,Attn_by_Ori,Tuning,DevPos] = getDeviantTrialType(T)
% [Attn,Ori,Attn_by_Ori,Tuning] = get_deviant_trial_type(T)
%
% Categorizes Deviant trials into categories:
%   Attn: Intended for Discrete trials.
%         1 = Attend In Chamber
%         2 = Attend Out Chamber
%         3 = Instruct In Chamber
%         4 = Instruct Out Chamber
%
%   Ori:  Categorize trials by orientation of stimuli
%         0 = Instruct Out Chamber therefore No Stimulus
%         1 = Orientation 0 Degrees, 2 = 90 degrees, etc.
%
%   Attn_by_Ori: 16 conditions as follows
%         [1,2,3,4] = As in Attn, for all for Ori==1
%         [5,6,7,8] = As in Attn, for all for Ori==2, etc.
%
%   Tuning: Intended for Tuning trials
%         The value is simply the trial's tuning value, plus 1 (switch from
%         0-indexing to 1-indexing)



Attn = zeros(size(T));
Ori = zeros(size(T));
Attn_by_Ori = zeros(size(T));
```

```
Tuning = zeros(size(T));

for i=1:length(T)
   Attn(i) = 0;
   if(T(i).trialDescription.stimulusIndex == -1)
      Attn(i) = 2;
```

```
    end
    Attn(i) = 1 + Attn(i) + T(i).trialDescription.explicitCue;


    Ori(i) = round(T(i).trialDescription.arrayOrientation/90)+1;


    Tuning(i) = T(i).trialDescription.tuningValue + 1;


    DevPos(i) = T(i).trialDescription.deviantPosition + 1;
end
```

```
Attn_by_Ori = Attn + 4*(Ori-1);
Ori(Attn == 4) = 0;
```

So, I think, what we really care out trialDescription.explictCue and that's it. We don't care where the actual deviantPosition is (since there's some chance it will happen on the Attend Out side).

We just want to compare Attn=1 to Attn=2 and ignore everything else.

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