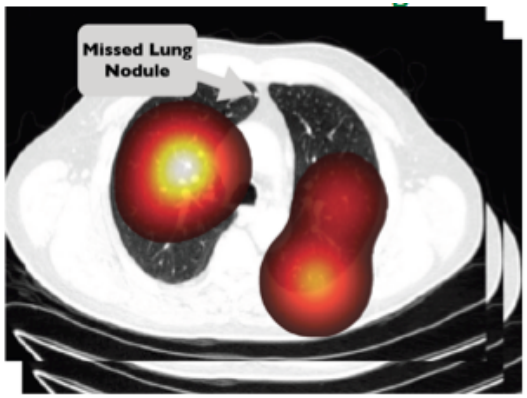
You don't know where your eyes have been and that could be problem.

Jeremy M Wolfe, Trafton Drew, Melissa L-H Vo

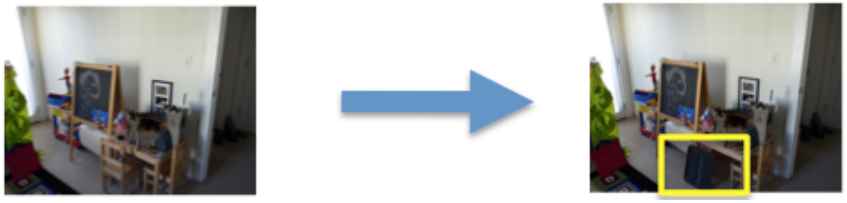
Exp 1: We had 24 radiologists searching for "lung nodules" in stacks of CT slices that image the 3D volume of the lung.



They found 57% of the nodules. When we tracked their eyes, we found they only looked at 41% of the volume of the lung (assuming a 2.5 deg window around fixation. 68% if you assume a 5 deg field)

Don't they know where they have looked? … maybe not. We tested that by asking people where they had fixated a few seconds ago. They don't know.

Exp 2: We had naïve observers perform an easy change detection task.



Look here for 3 sec — Locate the change

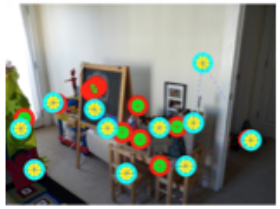
But, on ¼ of trials, we asked them to click 12 spots they had just fixated

Look here for 3 sec — Click where you looked

At the end of the exp, we had them look at 10 new scenes and tell us where *someone else* would have fixated.

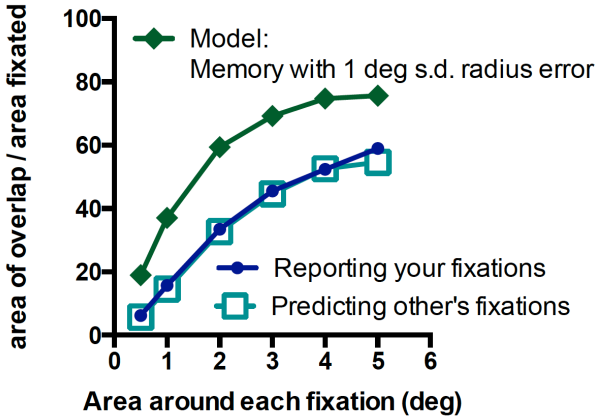
Where I think I looked

Red spots are real fixations. Blue are O's guesses about one's own fixations.



Where someone else thinks I might have looked

Teal are guesses about fixations of others



This is an ROC-style graph showing that Os are no better at recalling their fixations than predicting someone else's. The green line is a model that does much better.