

Psychology Fair 2016 T-scope slides and questions

This exhibit uses a slide projector equipped with a mechanical shutter.
When used together they make a tachistoscope, or T-scope.
It's used to show pictures for short periods of time.
In most research, computers have replaced projection T-scopes like this one.
But in some situations projectors are still the best tool.

Psychologists use T-scopes to study a wide variety of perceptual and cognitive processes.
We can use rapid visual presentation to answer questions like these:

Tell me what you think: **How quickly can you**

We recognize individual **letters** easily

Several letters is more challenging (brighter is easier, dimmer is harder)

Try several **letters and numbers** (not enough attention to process all)

Can you recognize all **8 letters**? (not enough attention to process all)

It should be easier to read the next two **sentences** (highly practiced, context helps)

Can you read the next two **word fragments**? (highly practiced, context helps)

Do you recognize the next two **objects**? (highly practiced)

In the next three slides, what **color are the shapes**? (shapes + colors)

The next three are **famous people**. Who are they? (increase exposure time)

For the next three slides, what **emotion** is on the person's face? (increase exposure time)

The next three slides are faces. Are they **male or female**? (increase exposure time)

Finally, **a complex scene**. Can you tell what it is? (increase exposure time)

Thanks for your attention. Any questions?

Tachistoscope

T-scope

an instrument used to show information for a very brief, measured period of time.



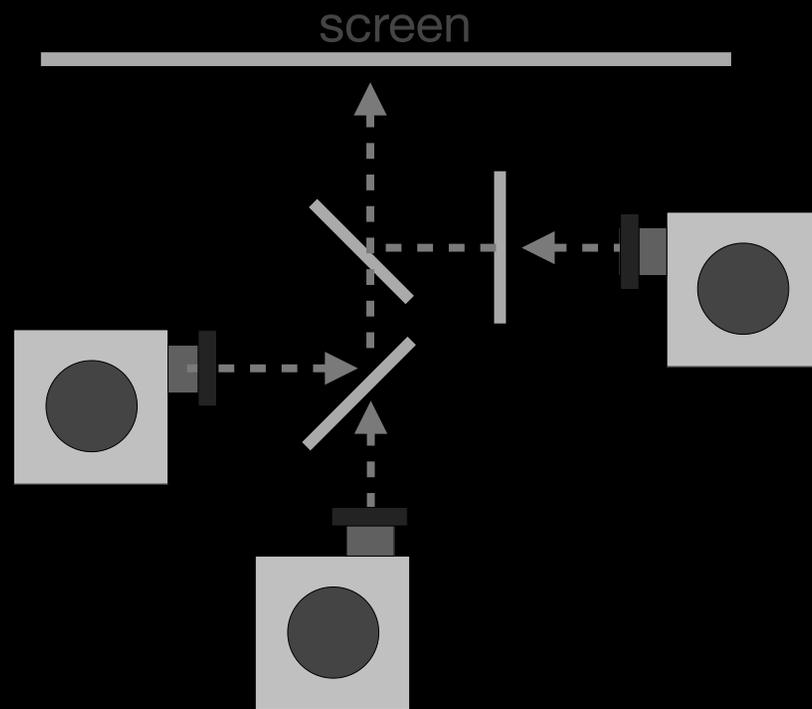
1 second = 1000 ms

sample exposure times:

10 ms = 1/100 s

50 ms = 1/20 s

3-field projection t-scope



R

M

BNWL

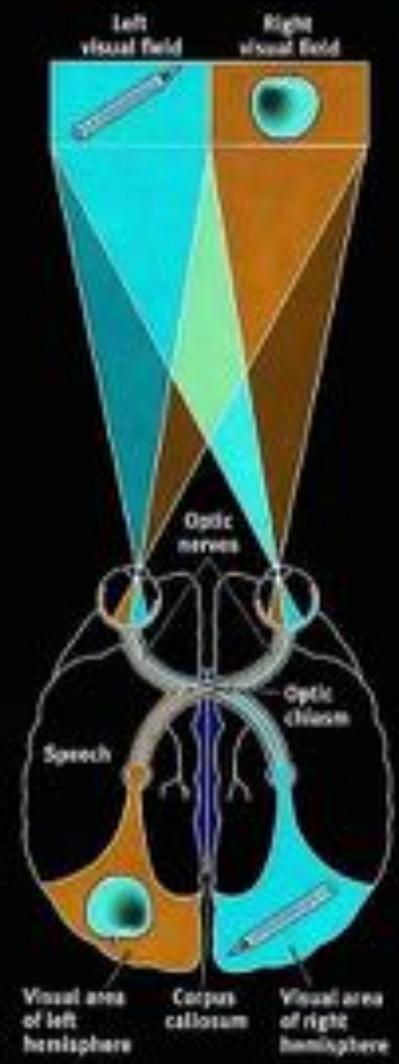
BNWL

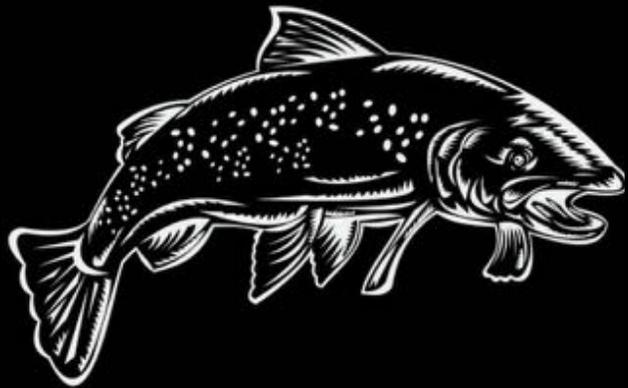
Window

exdeption

sB7z9

X

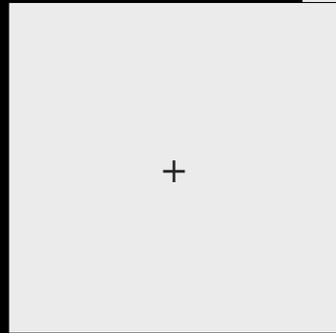






They were happy.

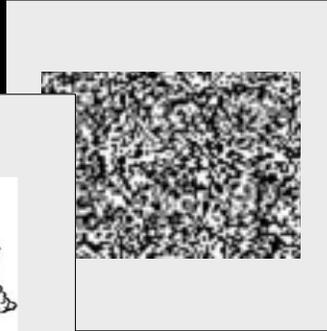
**Today must be
Friday.**



Focusing point



Stimulus



Mask

How fast can you ...

- identify a single letter
- read a word or sentence
- distinguish male from female
- recognize a facial expression



