

What can we learn by studying behavior?

➔ What does it mean to process a face holistically?

Face inversion effect

Composite face effect

Whole-part effect

Role of features in the processing of faces?

Recognizing caricatures

Norm-based coding of faces

What can we learn by studying behavior?

What information about a face do we store in our heads,
that *we can access* when recognizing the face?

Nancy Kanwisher video: face recognition is “holistic”*

What do you think it means to process a face “holistically”?

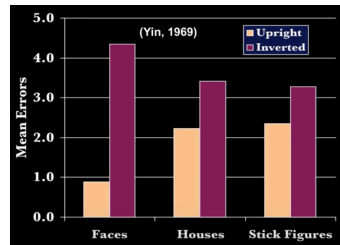
Why do we care??



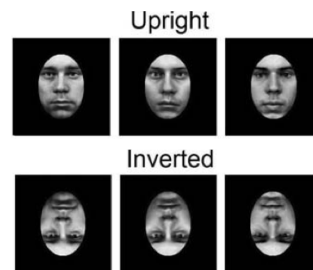
*hypothesis

Let's examine the
evidence...

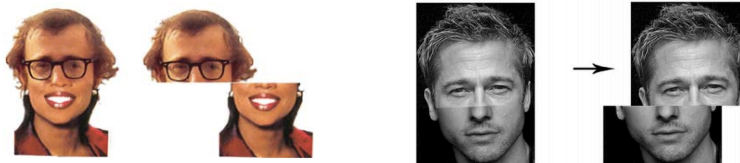
The face inversion effect



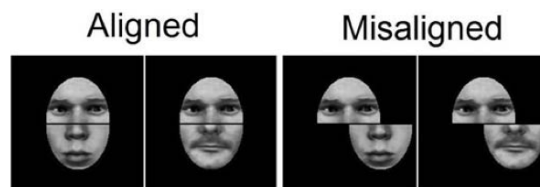
- much greater drop in memory performance for upside-down faces than for other objects
- same for “unfamiliar” faces
- suggests faces are perceived or remembered differently?



Composite face effect

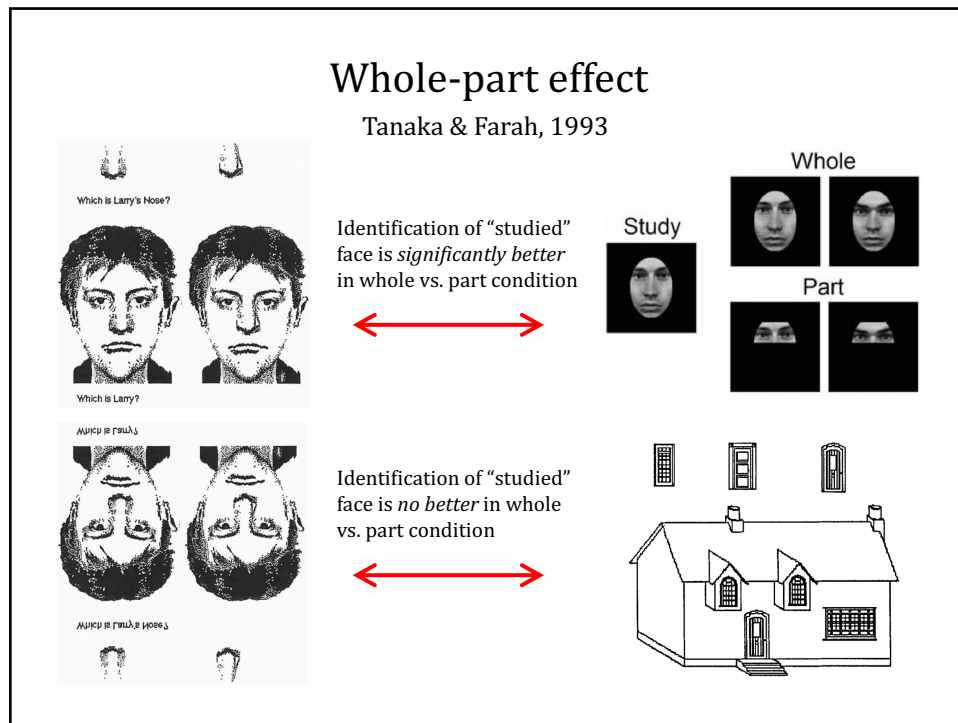


- are the top halves the same or different?
- better performance when misaligned
- effect *goes away* when faces are inverted



explore in Lab 2!

It's hard to attend to one half of the face without being affected by the presence of the other half




What can we learn by studying behavior?

What does it mean to process a face holistically?

Face inversion effect

Composite face effect

Whole-part effect

 Role of features in the processing of faces?

Recognizing caricatures

Norm-based coding of faces

But wait... what about face features?



Can you recognize these famous eyes?



What features of a face are most important for recognition?

... and why?



Who are these guys?



Recognizing caricatures

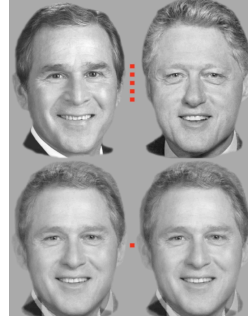
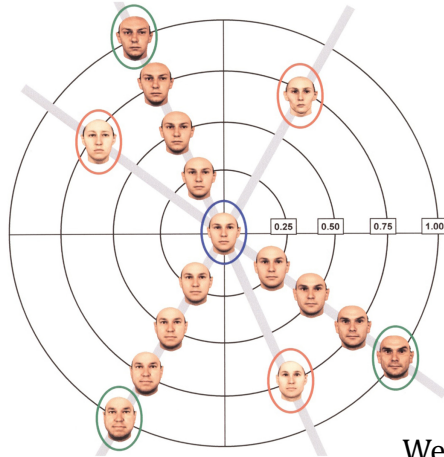


Deviation of facial landmarks from "average" face are *reduced* by 30%



Deviation of facial landmarks from "average" face are *increased* by 30%

Norm-based coding



We code how individual faces differ from an “average face”