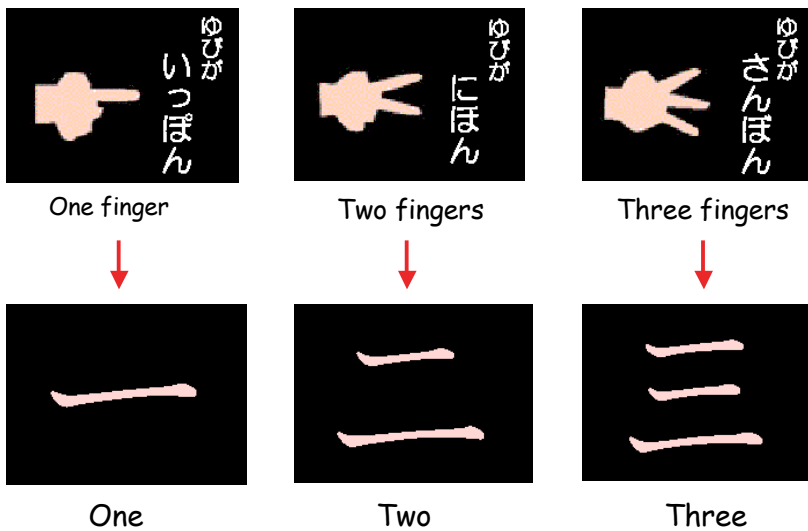
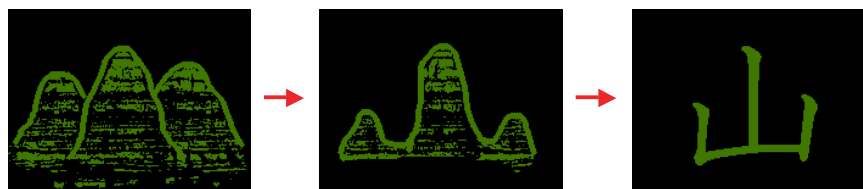


How were Chinese characters made?

(thanks to Mai for these great examples of the *iconicity* of Chinese characters!)



- Mountain



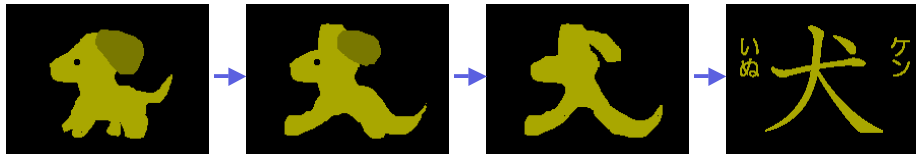
- Rain - from clouds



- Fire



- Dog



Some findings in the Scale Model Task

(come to class to see actual real live children on video doing this task! ⇒)

- 2.5-year-olds fail.
- 3-year-olds succeed.
- 2.5-year-olds succeed if told model is shrunk version of the room in which they will search ("shrinking machine").
- Overall, children are more likely to succeed if the model is more similar (identical) to the room in which they perform the search.

Piaget on Scale Model Task

- 2-year-olds are only beginning to develop *symbolic representations*. By the age of 3 this ability allows them to see the model as a representation of the real room.
- Younger children can succeed in the “shrunk-room” experiment because it turns the problem into a completely **concrete** one -- there are no representations, no symbols, only “one” room.
- The similarity of the model to the real room helps children succeed in the task because at this stage children are still influenced by **perceptual features** -- their representation of the model is not abstract enough.

Information Processing on Scale Model Task

- Succeeding at the task requires maintaining *two different representations* of the same object at the same time.
- 2.5-year-olds fail at the task because they lack the cognitive resources (memory, attention, or executive control) to maintain these two representations.
- The “shrinking-room” room experiment requires less resources -- **one representation** of the room is enough.
- Similarity between the model and the actual room makes the task easier because it helps children do the **mapping** between things in the model and things in the room, since children are often affected by perceptual similarity in analogy tasks.

Sociocultural Theories

- Child as social being.
 - Cognitive development occurs through **interactions** between child and other people.
 - Cognitive development occurs within a broad **cultural context** which includes **cultural tools**.
 - Children are teachers and learners, products of their cultures.
 - Change occurs through:
 - ❖ *Guided Participation*
 - ❖ *Intersubjectivity (Joint Attention, Social Referencing)*
 - ❖ *Social Scaffolding*

Information Processing on Scale Model Task

- The idea of using a model to represent a physical entity is a product of culture. Models are *cultural tools*.
- Children learn to use models to represent real places by *interacting with others* who use models in that way. Younger children fail because of lack of experience.
- Younger children succeed in the shrinking room because the model is not being used as such. There is **no cultural tool** being used.
- (a bit of a stretch) The greater similarity in the rooms help children with *intersubjectivity*, when the experimenter says it is in “the same place”, it is easier for them to understand what the experimenter means.