CS472
Human Computer Interaction

Final Presentation (Dec 20th)

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Motivation

How many of you have used a **?**

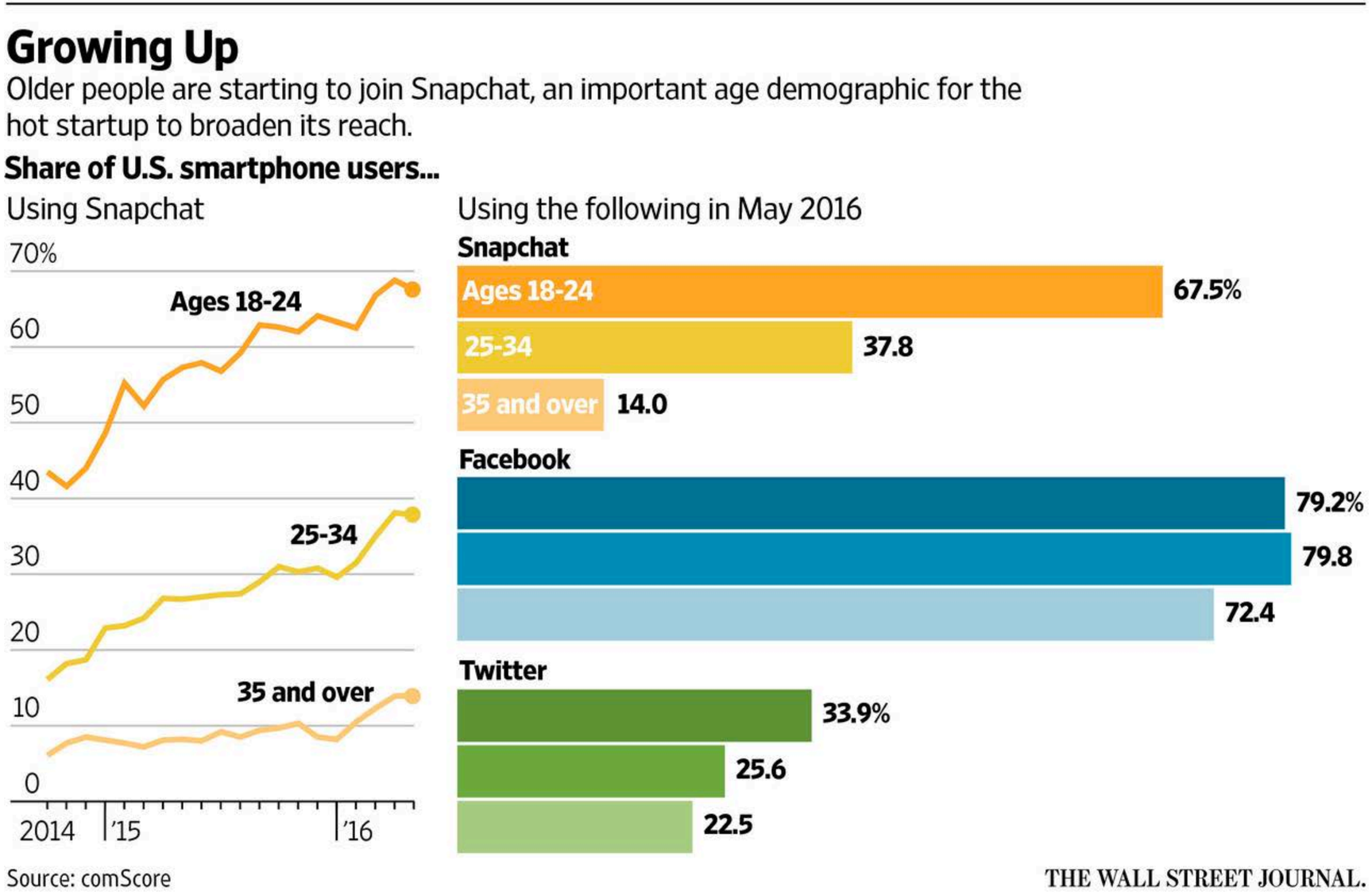
snapchat

Motivation

67.5%

of American teenagers

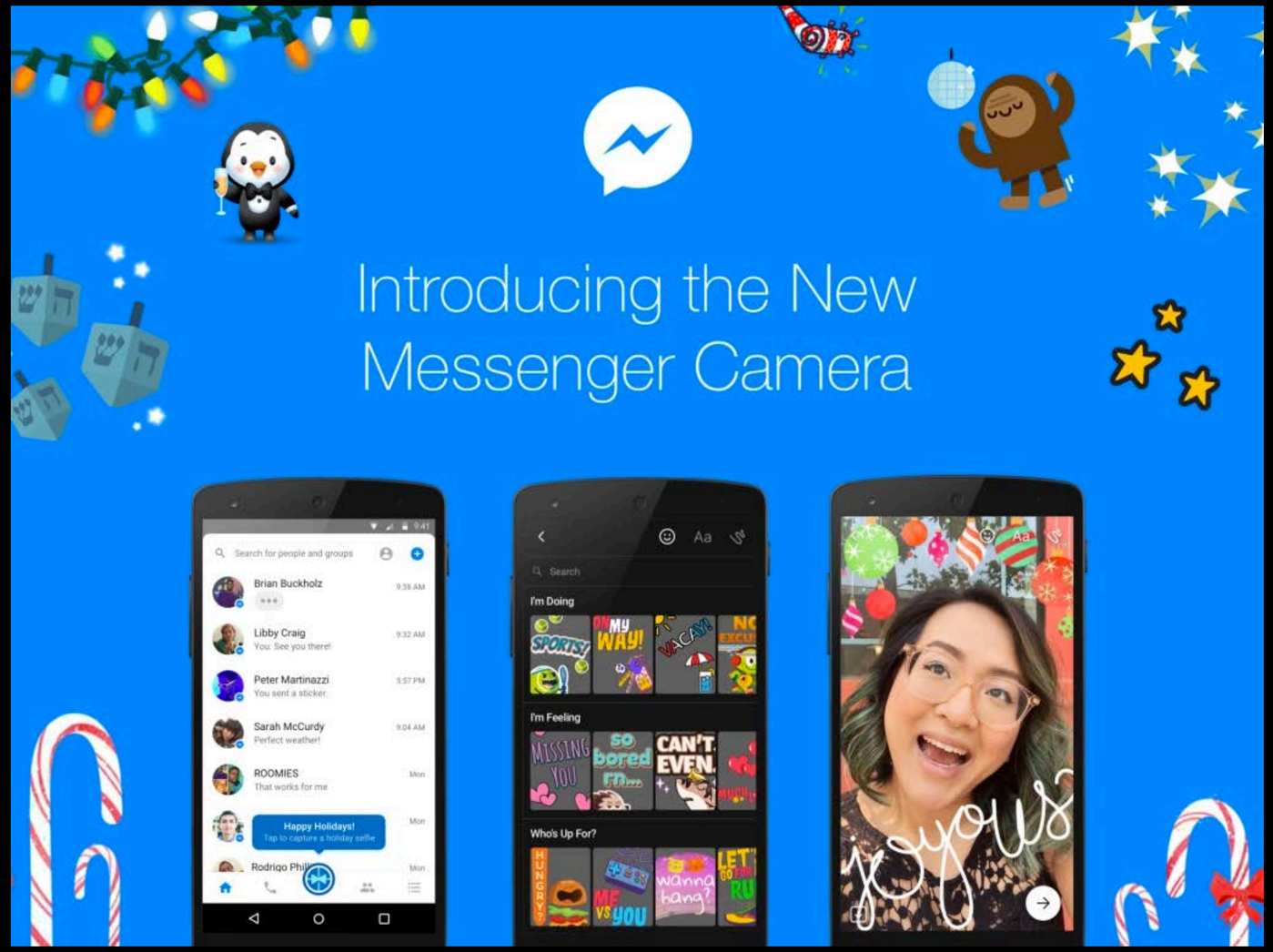
Motivation


Growing Up
Older people are starting to join Snapchat, an important age demographic for the hot startup to broaden its reach.
Share of U.S. smartphone users...
Using Snapchat
70%
60
50
40
30
20
10
0
Ages 18-24
25-34
35 and over
2014
'15
'16
Using the following in May 2016
Snapchat
Ages 18-24
67.5%
25-34
37.8
35 and over
14.0
Facebook
79.2%
79.8
72.4
Twitter
33.9%
25.6
22.5
Source: comScore
THE WALL STREET JOURNAL.

Motivation

Motivation

5 days ago...



Motivation

How are these doodles conveying emotions?

Goal

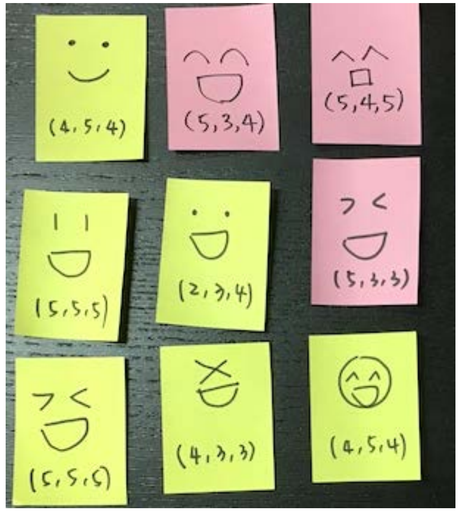
1. How they doodle emotions?

2. How people comprehend doodles?

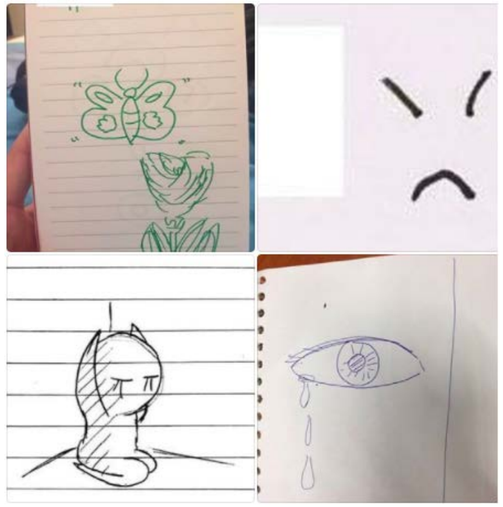
Drawmoji

An Analysis on Emotion-depicting Doodles

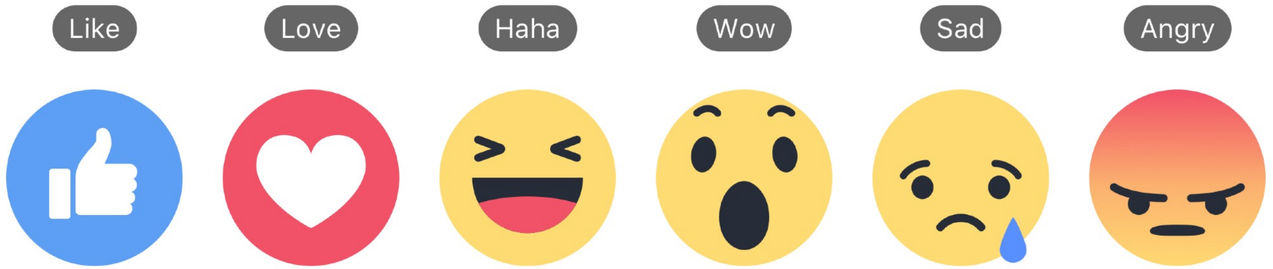
1. Gesture Elicitation



2. Embedding Emotion into Doodles



1. Gesture Elicitation



6 emoticons
x
12 participants
x
2 gesture designs

1. Gesture Elicitation

5-point Likert Scale

Metaphorically logical toward functionality
Users can easily see what the gestures are for.

Easy to remember without hesitation
Users focus on their tasks rather than on the interface.

Ergonomically easy to draw
Not physically stressful when used often.

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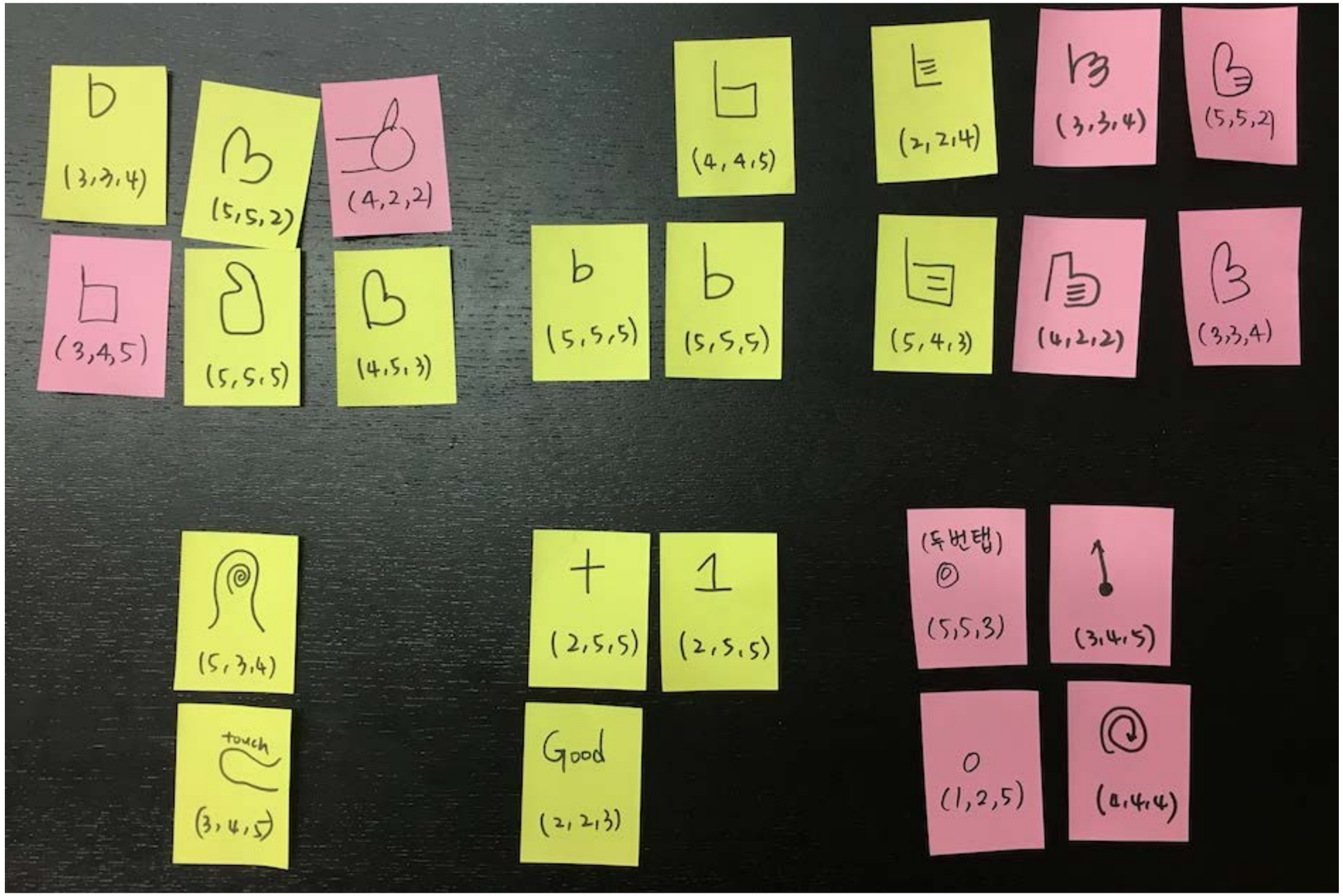
1. Gesture Elicitation



1. Gesture Elicitation

Bottom-up classification

Converge to 6 main categories

1. *Facial Expression / Shape*
2. *Simplify the shape*
3. *Internet culture (ex. XD)*
4. *Abstract feeling*
5. *Text*
6. *Movement*

1. Gesture

- Face Expression & Mimic Shape Dominate
- How about sending the gestures directly to others?

Description → Drawing

2. Doodle

- Transfer the emotion by doodling
- Receive the emotion from doodle

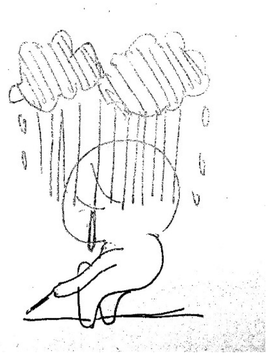
Emotion → Drawing → Emotion

2. Embedding Emotion into Doodles

UC Davis
Set of Emotion Expressions
(UCDSEE)

1. *Anger*
2. *Disgust*
3. *Embarrassment*
4. *Fear*
5. *Happiness*
6. *Neutral*
7. *Pride*
8. *Sadness*
9. *Shame*
10. *Surprise*

2. Embedding Emotion into Doodles



20 participants
x
randomly chosen 4 emotions

Encode

- What do you consider when you draw the doodle?
- What are the most important indicators to transfer the emotion?
- What do you expect other will interpret your doodle?

Decoder

- How do you feel when seeing this doodle?
- What did you see in this doodle?
- What are the most important indicators to sense the emotion?
- Choose emotions from the emotion set match to the doodle

User Study Results

Encoding

Strategy

- Type
  - Facial Expression
  - Action
  - Metaphor
- Simplicity
- Accuracy

Indicator

- Well-know cue
- Eye & Mouth
- Gaze
- Movement
- Metaphor to objects

Expectation

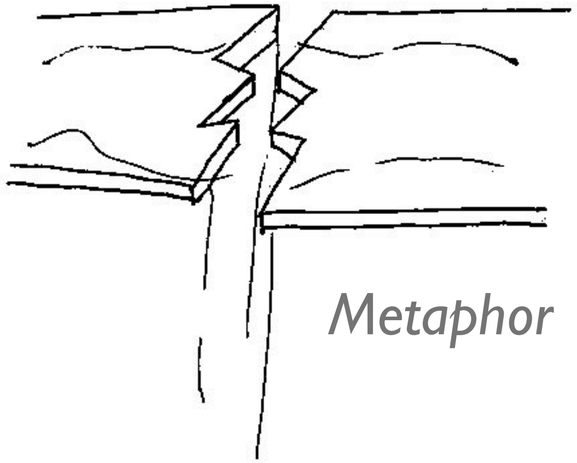
- Success / Fail
- Direct / Indirect
- Humorous attitude

Encoding

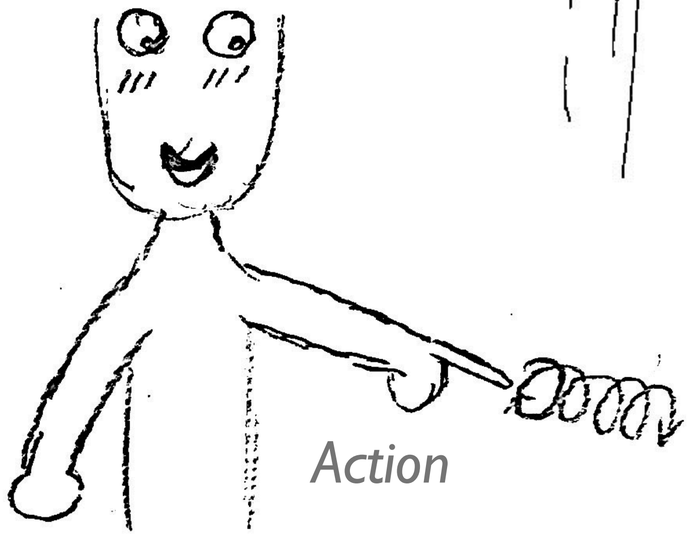
Strategy

- Type
  - Facial Expression
  - Action
  - Metaphor
- Simplicity
- Accuracy

Facial Expression



Metaphor

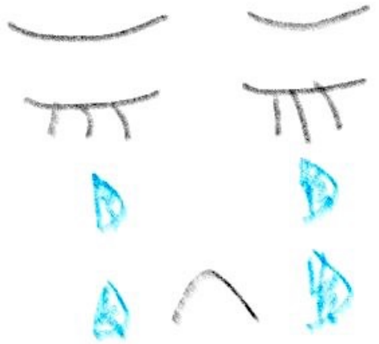


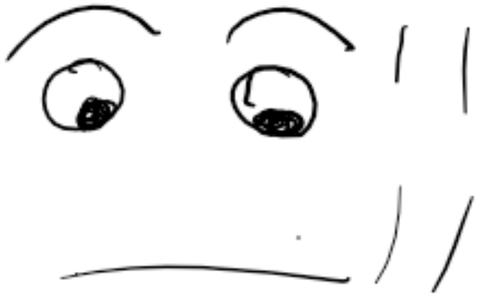
Action

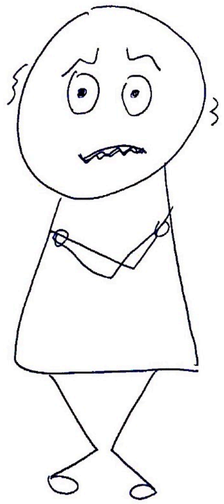
Encoding

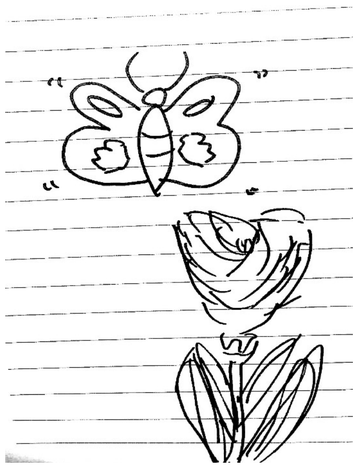
Indicator

- Well-know cue
- Eye & Mouth
- Gaze
- Movement
- Metaphor to objects









Encoding

Expectation

- Success / Fail
- Direct / Indirect
- Humorous attitude

“ **Others may interpret it as a completely different emotions!**

Encoding

Expectation

- Success / Fail
- Direct / Indirect
- Humorous attitude

“ **Hope others to notice my feeling without annoying them…**

Encoding

Expectation

- Success / Fail
- Direct / Indirect
- Humorous attitude

> **Using doodles make more dramatic effect then simple typed text**

Decoding

1. Positive / Negative

- Identify easily whether the doodle is positive or not

2. Facial Expression

- Catch the emotion faster especially for facial expression

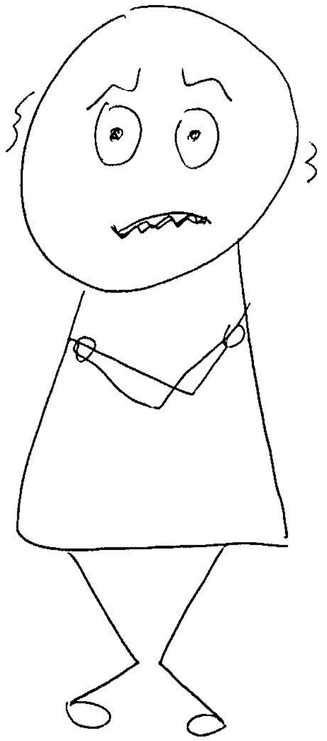
3. Thinking Reasons

- Process of thinking reason lead to wrong answer.

Decoding

1. Positive / Negative

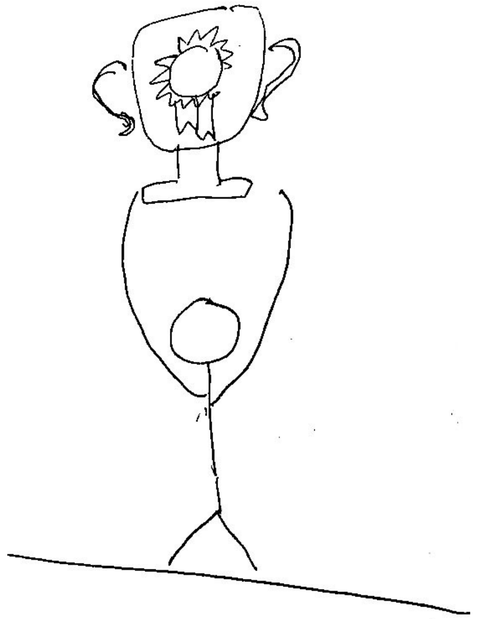
- Identify easily whether the doodle is positive or not



Decoding

2. Facial Expression

- Catch the emotion faster especially for facial expression



Decoding

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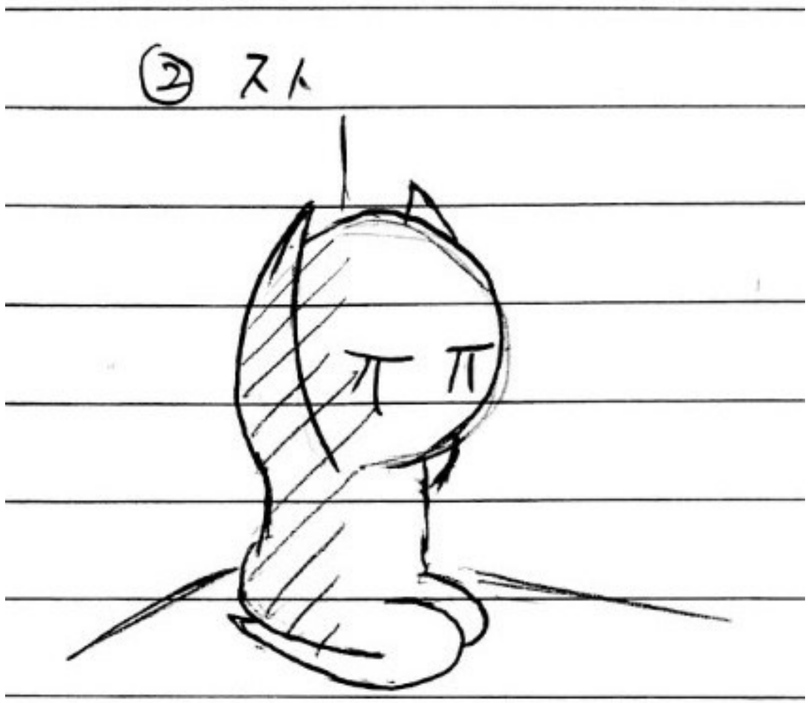
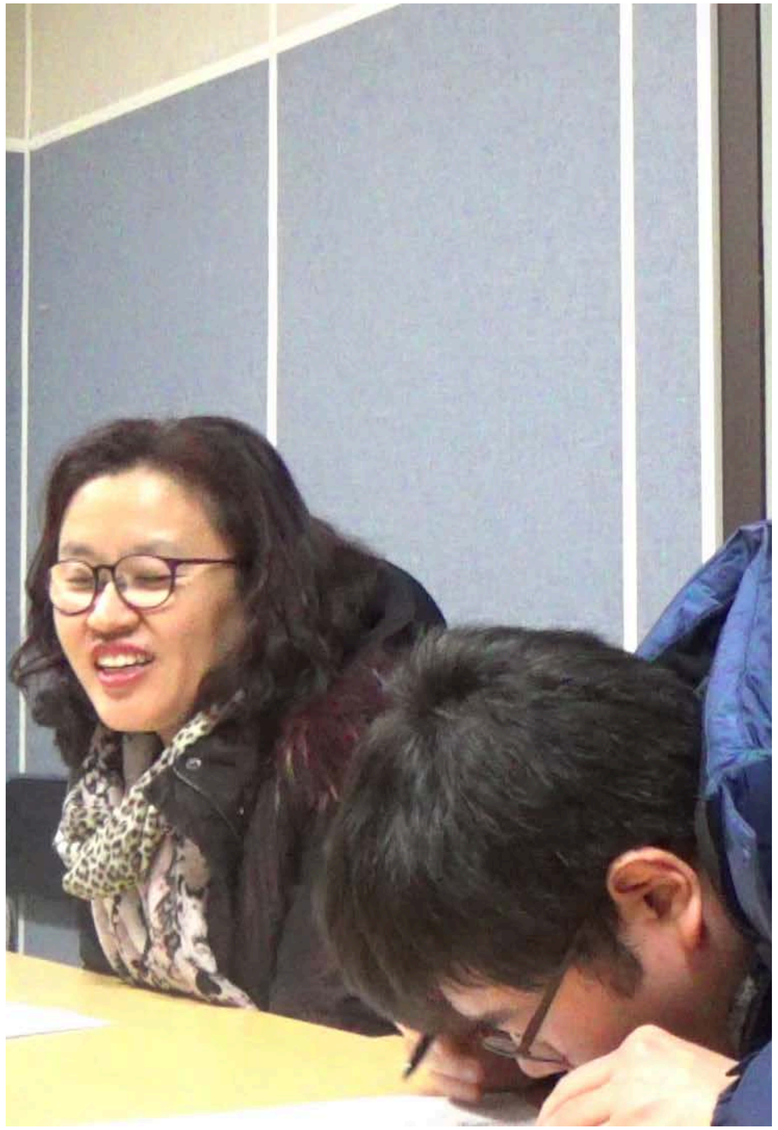
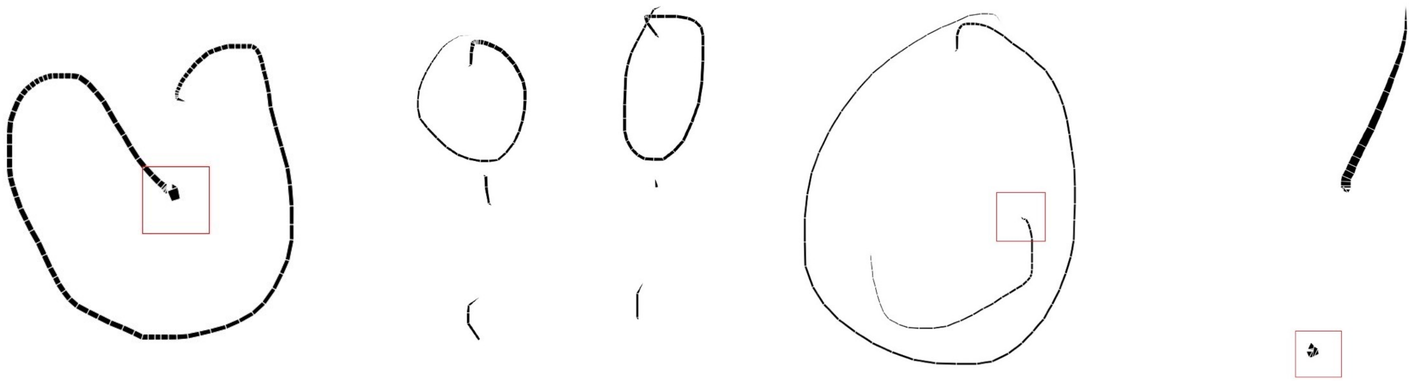
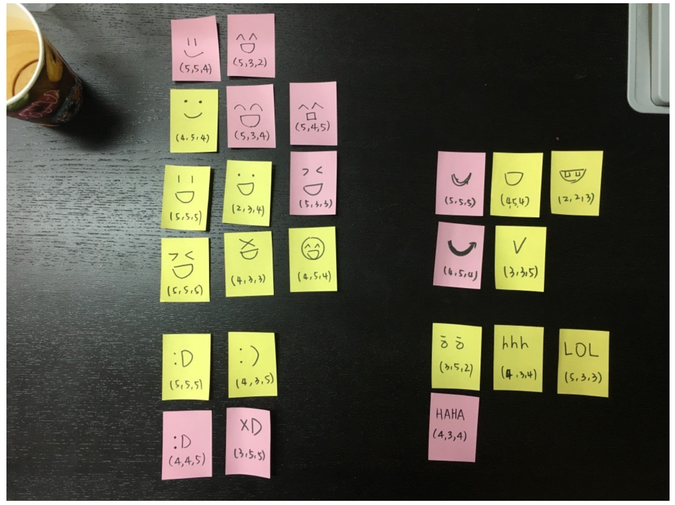
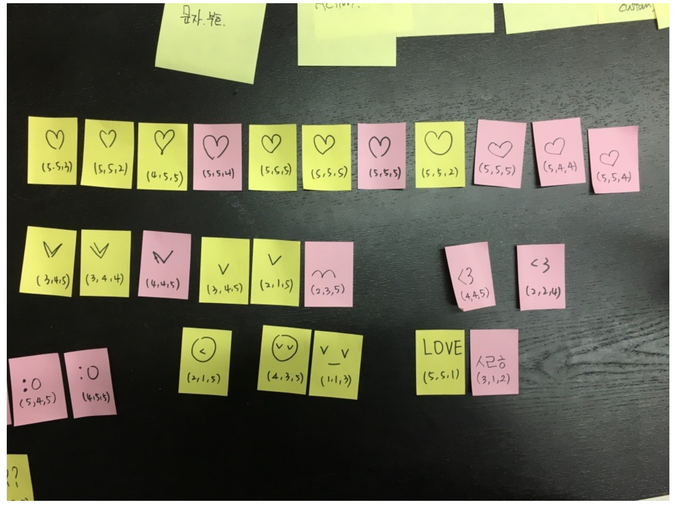
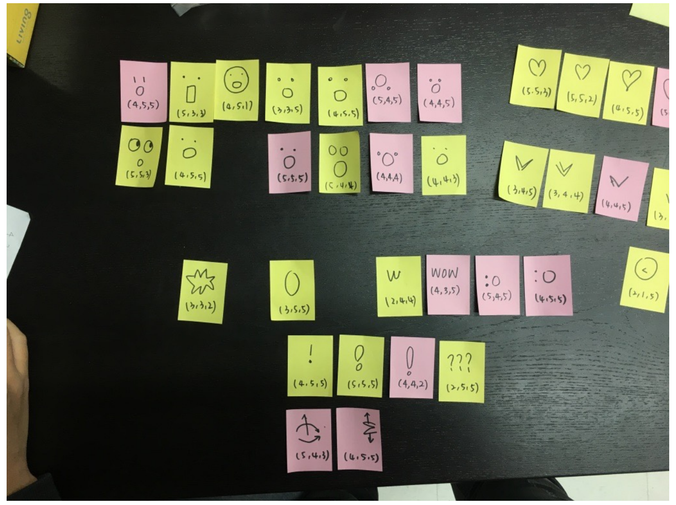
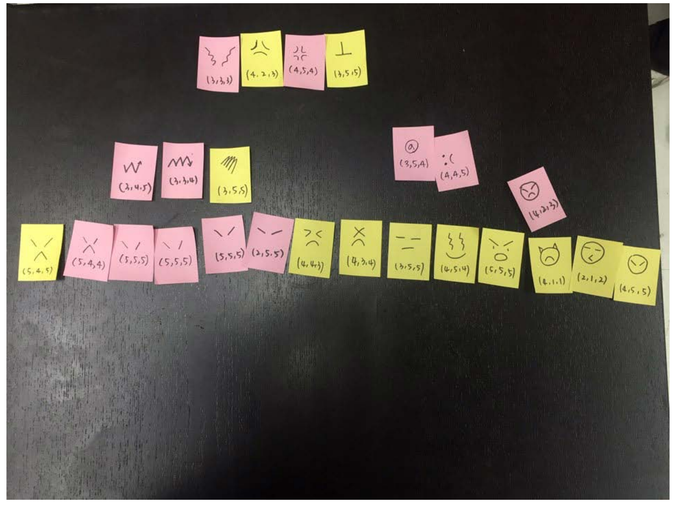
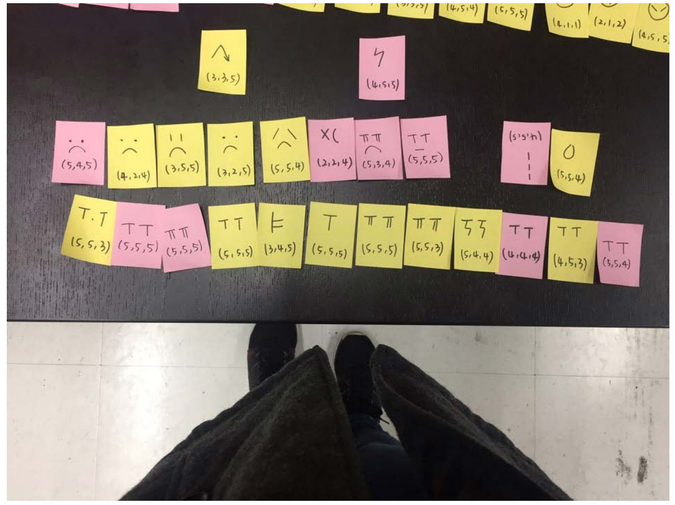


any questions?

An unexpected findings





Compare & Contrast

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