Second Language Learners Play the "Imitation Game"

The Use of Immediate Social Media to Understand Perceived Native-like Communication Strategies

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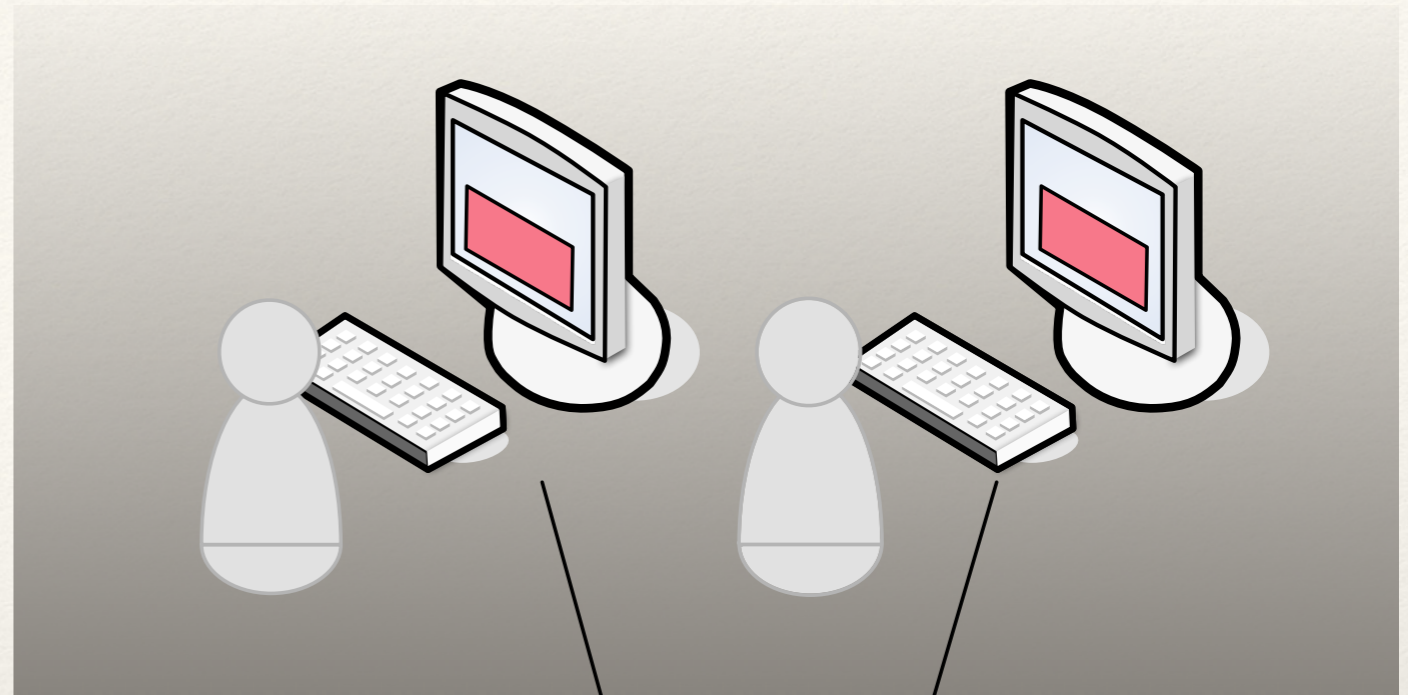4th December 2016

I was in the coffee shop …
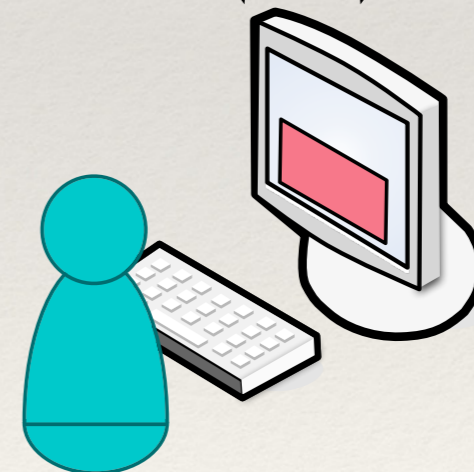
The Imitation Game

What is the Turing Test?

❖ "Computing Machinery and Intelligence" (Turing, 1950)

❖ "Can machines think?"
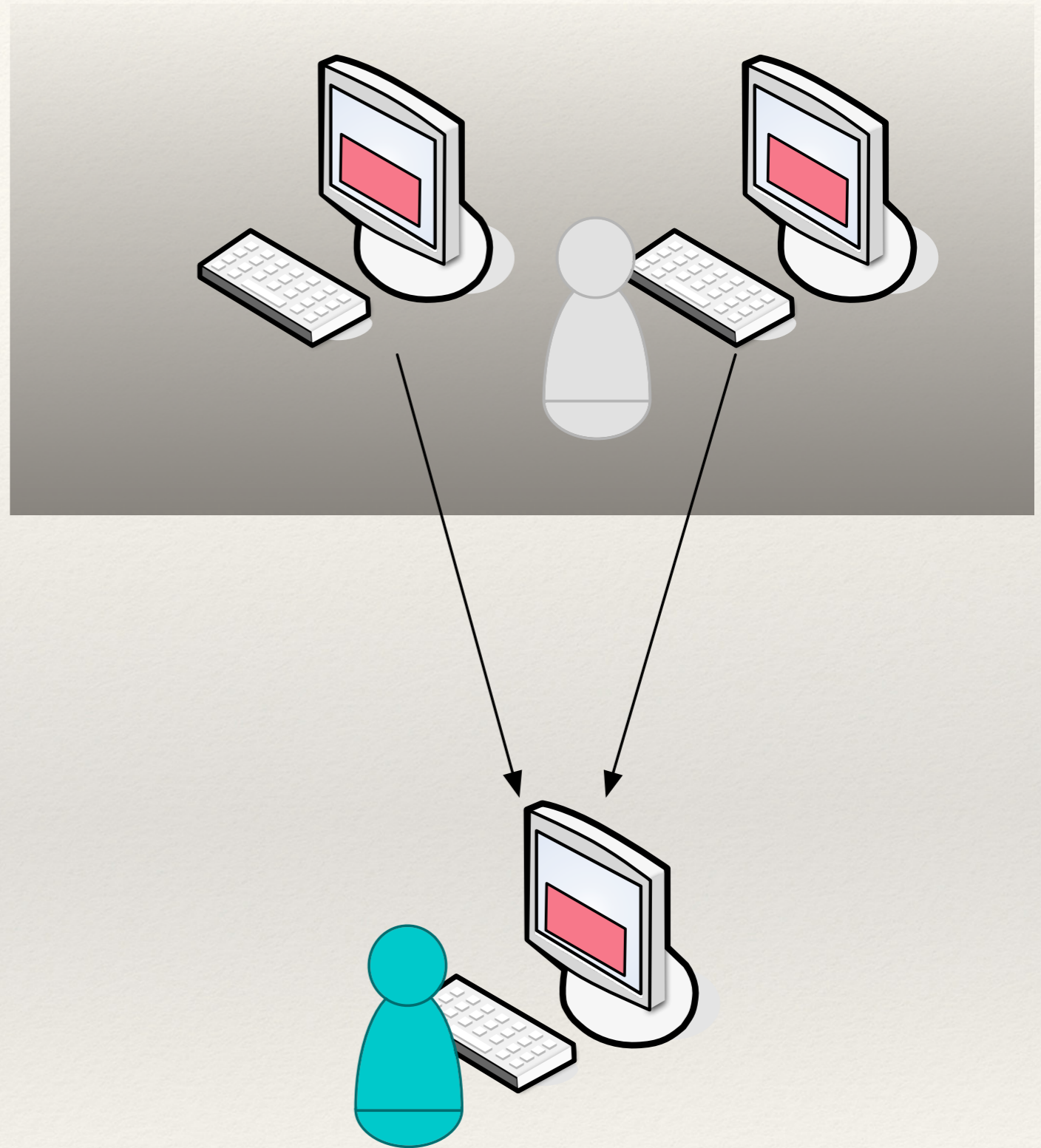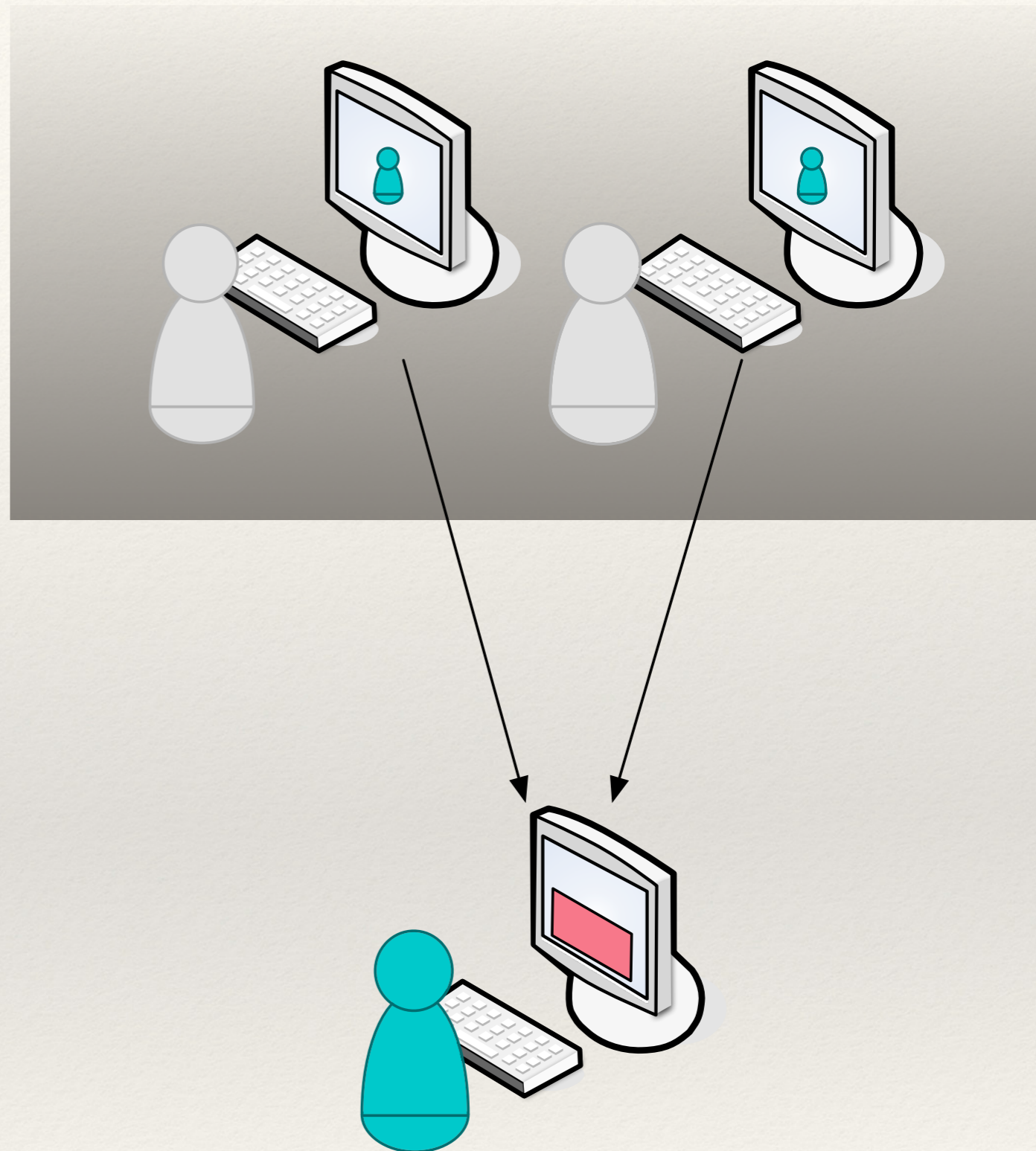
Turing's Imitation Game

The Turing Test

Modified Turing's Imitation Game

Turing Test

- Edmonds & Gershenson (2000)

    - Machines will not pass the Turing Test

    - Machines cannot learn

    - Learning and adaptation should be considered separate

Imitation Game

- Computers can imitate but not well

- An Imitation Game with visual input will thwart all communicative ability

- Embodiment is necessary for learning to behave like a human

What is Periscope?

❖ A live streaming app on iOS and Android devices

❖ Launched March 2015

❖ Developed by Keyvon Beyvour and Joe Burnstein as a response to Twitter's lack of video media during real-world events.

❖ Acquired by Twitter before launch

Live Video Streaming

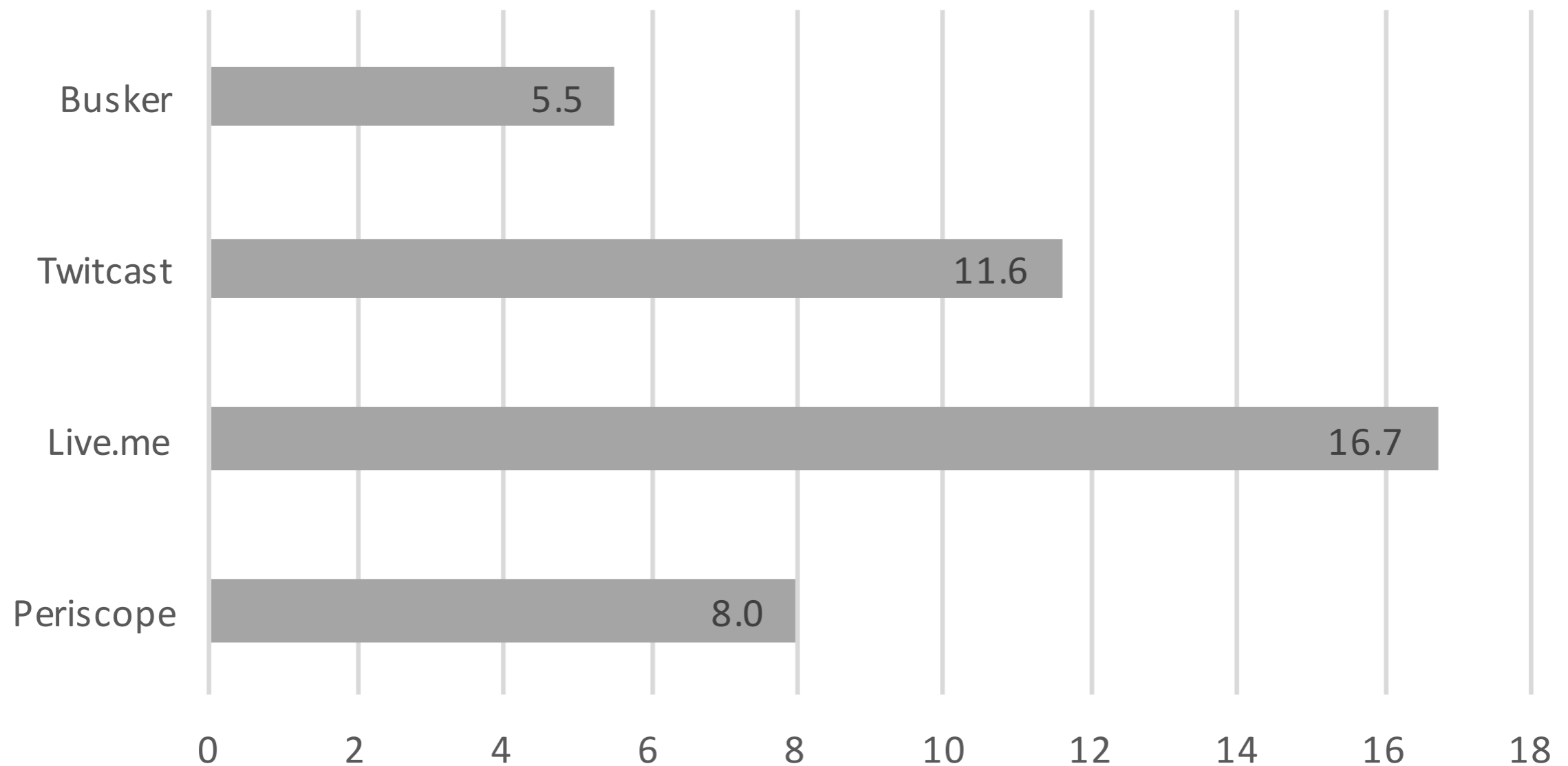- Also Streaming Media; "while" being delivered from provider to end-user; not downloaded content

- Other live streaming services:

  - Meerkat

  - Busker

  - live.me

  - Twitcast

  - YouTube Live

  - Facebook Live

Times

Average Response Time to Comments

Platform	Value
Busker	5.5
Twitcast	11.6
Live.me	16.7
Periscope	8.0

(x-axis: 0, 2, 4, 6, 8, 10, 12, 14, 16, 18)

Keyword: Linguistic Economy

Interactive Media

❖ "Interactive media is the integration of digital media including combinations of electronic text, graphics, moving images, and sound, into a structured digital computerized environment that allows people to interact <u>with the data</u> for appropriate purposes." (England and Finley, 2002 (2011))

Before Periscope
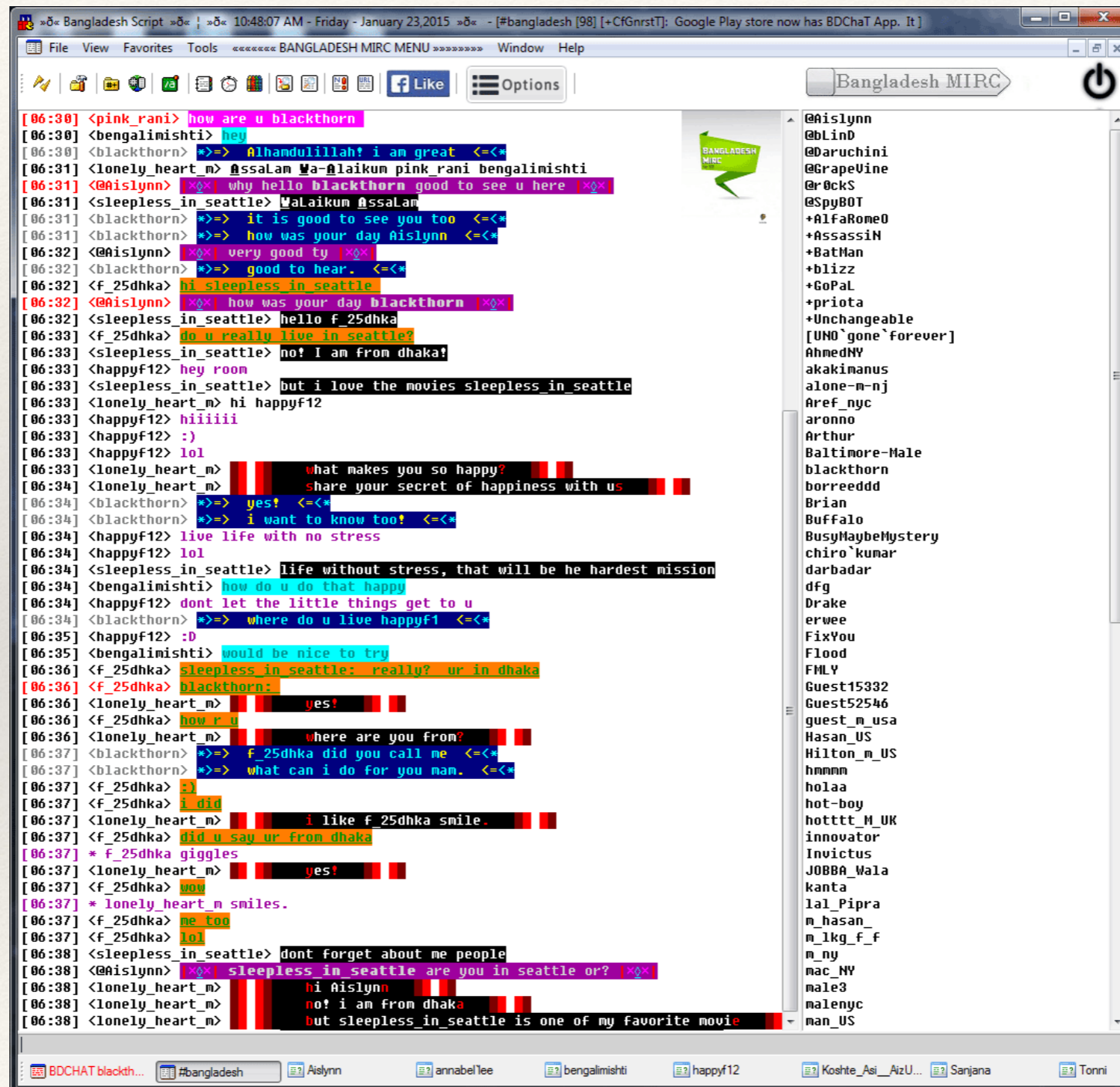
```
[06:35] <bengalimishti> would be nice to try
[06:36] <f_25dhka> sleepless_in_seattle: really? ur in
[06:36] <f_25dhka> blackthorn:
[06:36] <lonely_heart_m>              yes!
[06:36] <f_25dhka> how r u
[06:36] <lonely_heart_m>         where are you from?
[06:37] <blackthorn> *>=>    f_25dhka did you call me  <=<
[06:37] <blackthorn> *>=>    what can i do for you man.   <=
[06:37] <f_25dhka> :)
[06:37] <f_25dhka> i did
[06:37] <lonely_heart_m>        i like f_25dhka smile.
[06:37] <f_25dhka> did u say ur from dhaka
[06:37] * f_25dhka giggles
[06:37] <lonely_heart_m>              yes!
[06:37] <f_25dhka> wow
[06:37] * lonely_heart_m smiles.
[06:37] <f_25dhka> me_too
[06:37] <f_25dhka> lol
[06:38] <sleepless_in_seattle> dont forget about me peop
[06:38] <@Aislynn> |×◇×| sleepless_in_seattle are you
```

Catfish, Sockpuppet and Bot

❖ **Catfish** - "A catfish is someone who pretends to be someone they're not […]" (from Urban Dictionary); "a person who creates a fake online profile in order to fraudulently seduce someone." (Harris, 2013)

❖ **Sockpuppet** - "A sockpuppet is an online identity used for purposes of deception." (Wikipedia)

❖ **Bot** - "a software application that runs automated tasks (scripts) over the Internet." (Dunham and Melnick, 2008)

Why bots cannot survive in Periscope?

❖ Keywords in Artificial Intelligence:

  ❖ goals

  ❖ action

  ❖ perception (vs sensation)

  ❖ environment

  ❖ knowledge

  ❖ learning

Second Language Learners

- Experience of the (or a) world

- High in knowledge

- Learning machines

So let's Periscope!

The Interviews

The Interviews (1)

❖ 16 Periscope users

❖ Japan (6); USA (3); Australia, Canada, Switzerland, Norway, Russia, Taiwan, Philippines (1 person each).

❖ Native speaker of English (5); Non-native Speaker (11)

❖ Male (7), Female (9)

❖ Average age = 39.9 years old

The Interviews (2)

- ❖ 14% broadcast, 86% viewing

- ❖ average 11 broadcasts per month

- ❖ 31 minutes per broadcast

- ❖ broadcasting 6.5 hours per month, viewing 41.3 hours per month

End Game

The Experiment(s)

The Experiments

❖ Turing Test (Tang Test)

❖ Longitudinal following of L2 viewer

Fluency and Accuracy

- ❖ As a broadcaster
  - ❖ Speaking
  - ❖ Reading
  - ❖ High in fluency practice
  - ❖ Low in accuracy practice
- ❖ As a viewer
  - ❖ Listening
  - ❖ Reading
  - ❖ Writing
  - ❖ High in fluency practice
  - ❖ Low in accuracy practice

❖ Copeland, J. (2000). The Turing Test. Minds and Machines, 10, 519–539.

❖ Dunham, K., & Melnick, J. (2008). Malicious Bots: An Inside Look into the Cyber-Criminal Underground of the Internet. CRC Press.

❖ Edmonds, B., & Gershenson, C. (2012). Learning, Social Intelligence and the Turing Test. Retrieved 25 October 2016, from http://cfpm.org/cpmrep215.html

❖ England, E., & Finney, A. (2011). Interactive Media - What's that? Who's involved? Retrieved 3 December 2016, from http://www.atsf.co.uk/atsf/interactive_media.pdf

❖ Harris, A. (2013). Who Coined the Term 'Catfish'? Retrieved 3 December 2016, from http://www.slate.com/blogs/browbeat/2013/01/18/catfish_meaning_and_definition_term_for_online_hoaxes_has_a_surprisingly.html

❖ Pawley, A., & Syder, A. H. (1983). Two puzzles for linguistic theory: nativelike selection and nativelike fluency. In Language and Communication (pp. 191–225). London and New York: Longman.

❖ Periscope, T. (2015). Periscope. Retrieved 3 December 2016, from https://www.periscope.tv

❖ Turing, A. (1950). Computing Machinery and Intelligence. Mind, 49, 433–460.