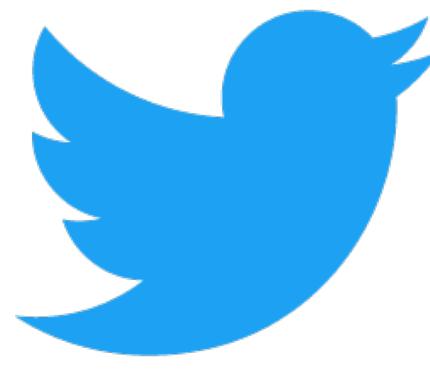
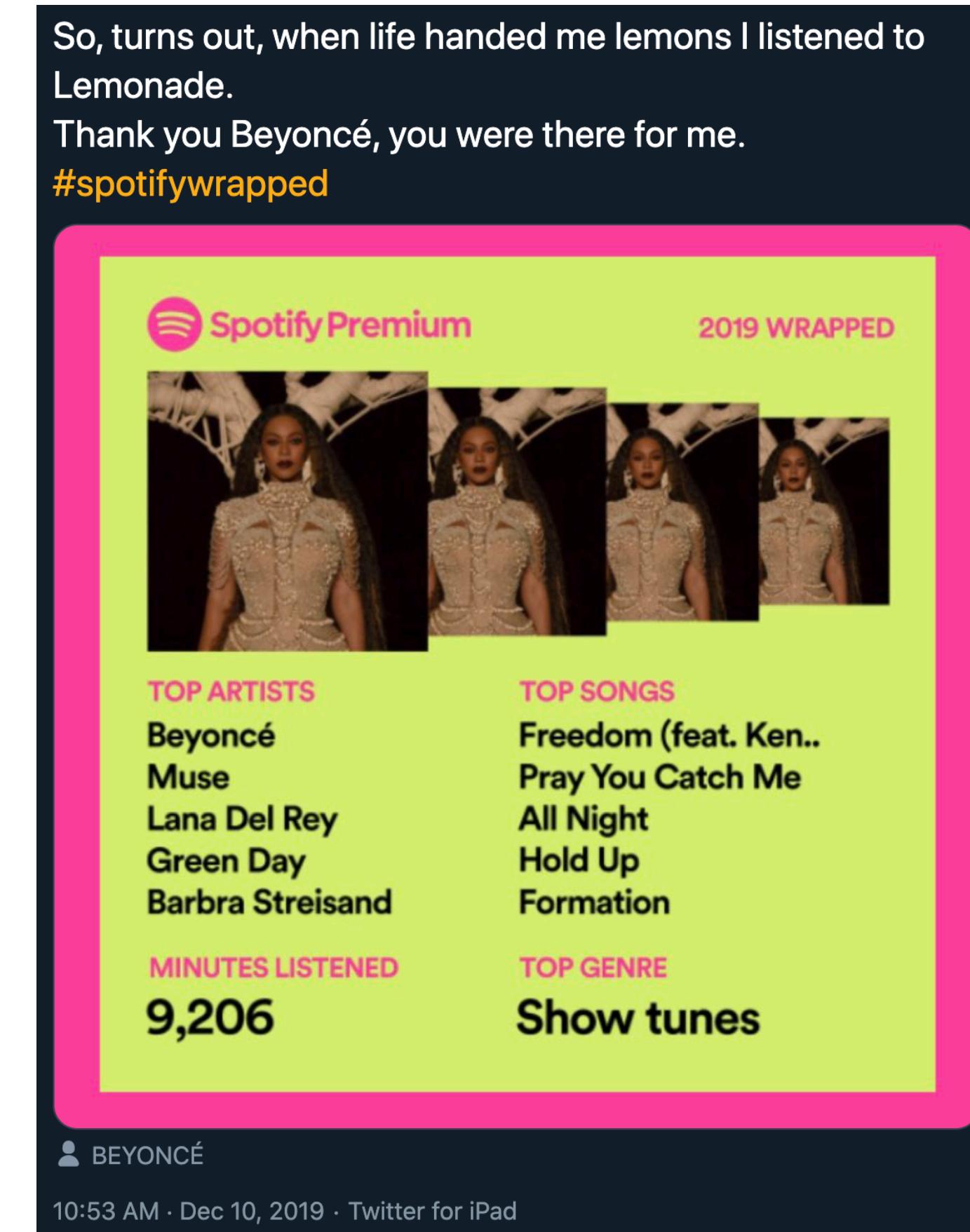
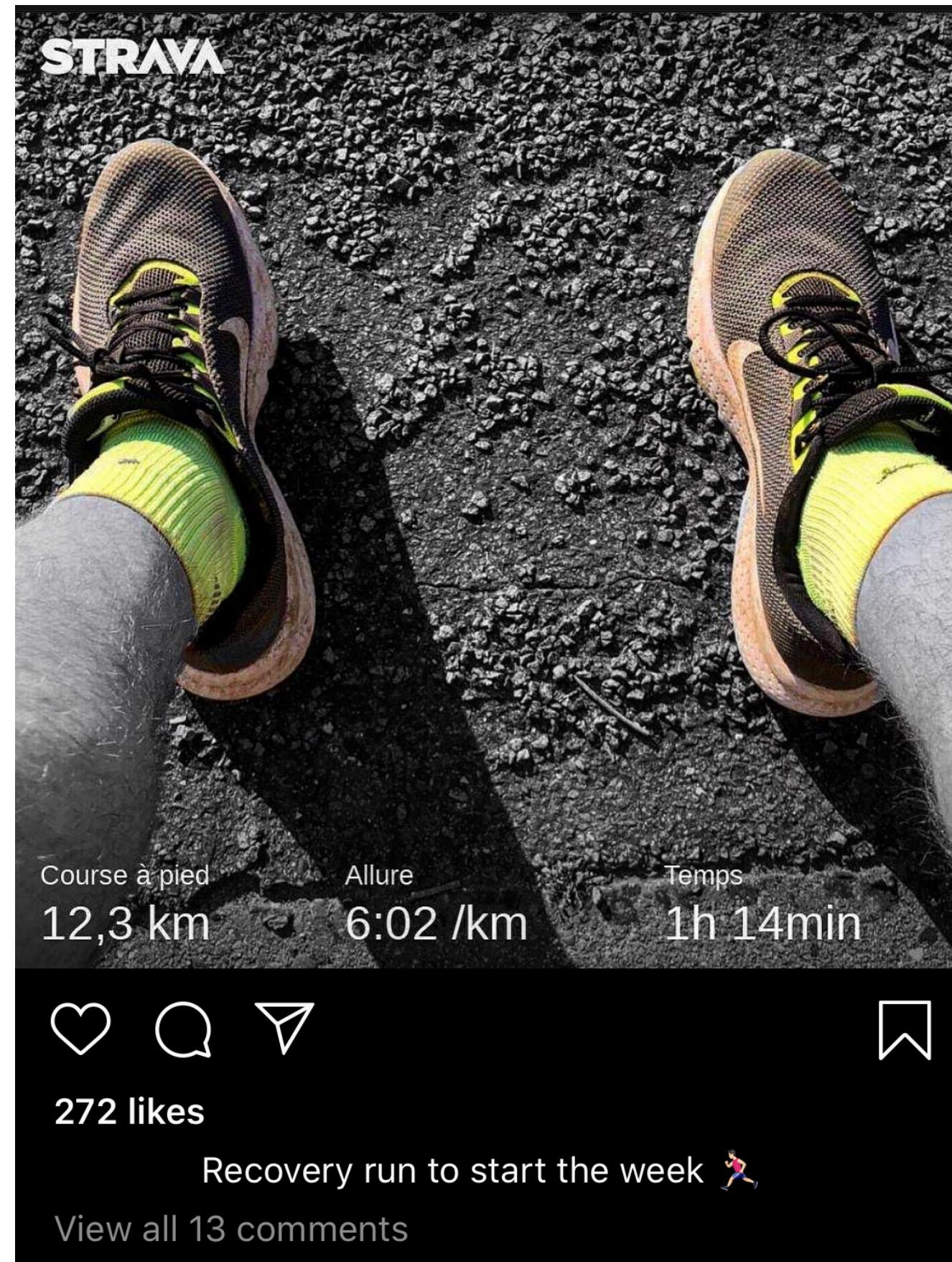
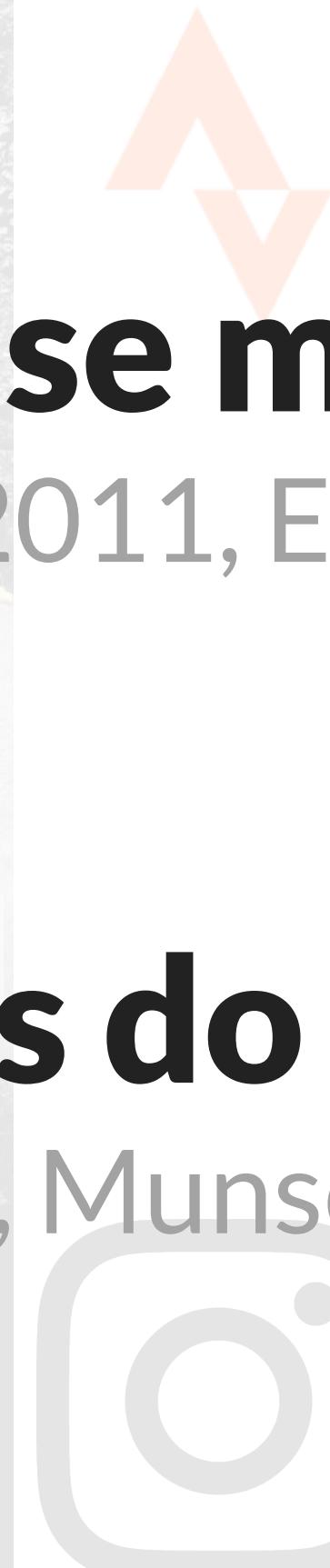
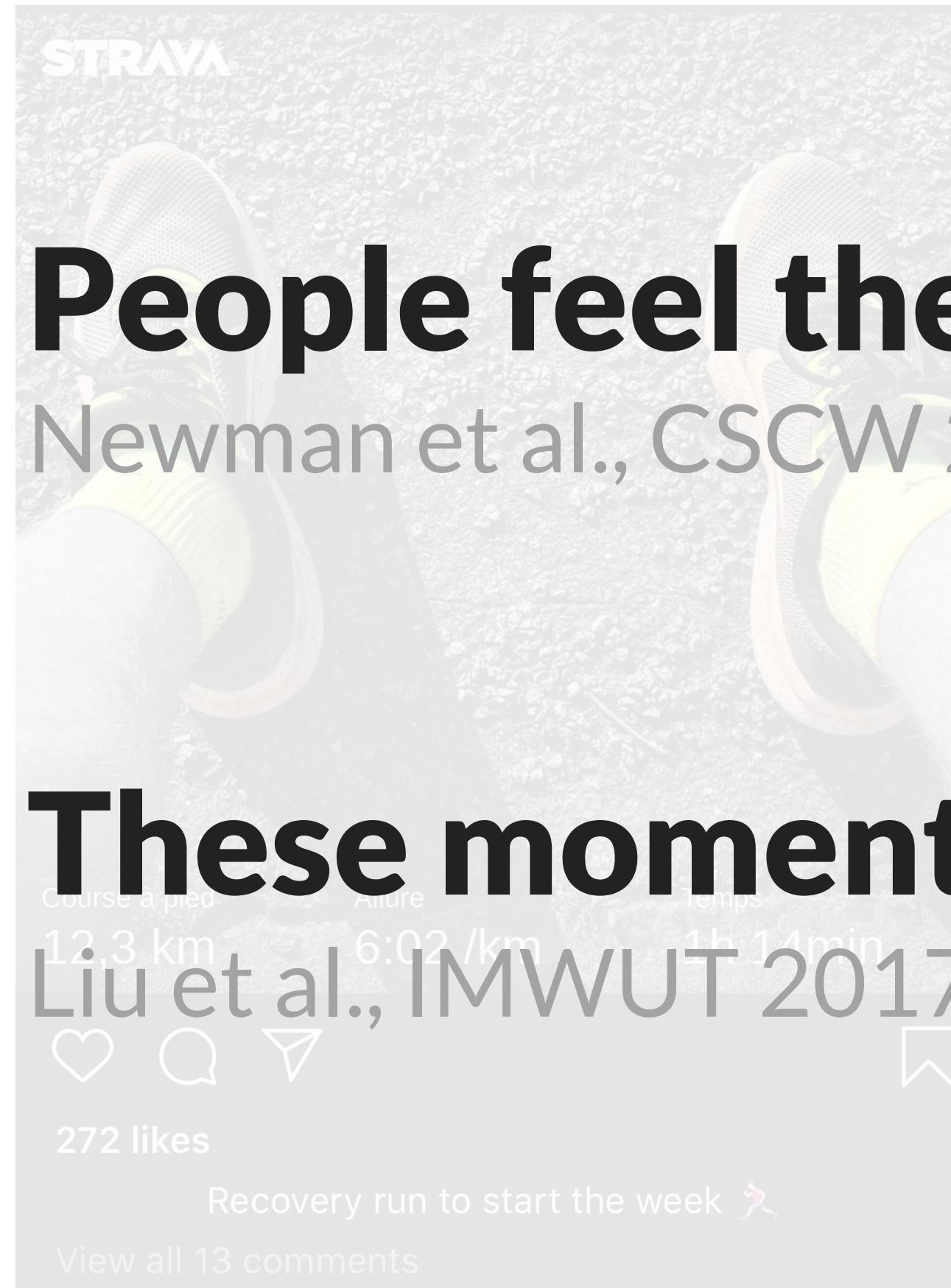


# **Exploring Design Principles for Sharing of Personal Informatics Data on Ephemeral Social Media**

Daniel A. Epstein, Siyun Ji, Danny Beltran,  
Griffin D'Haenens, Zhaomin Li, Tan Zhou



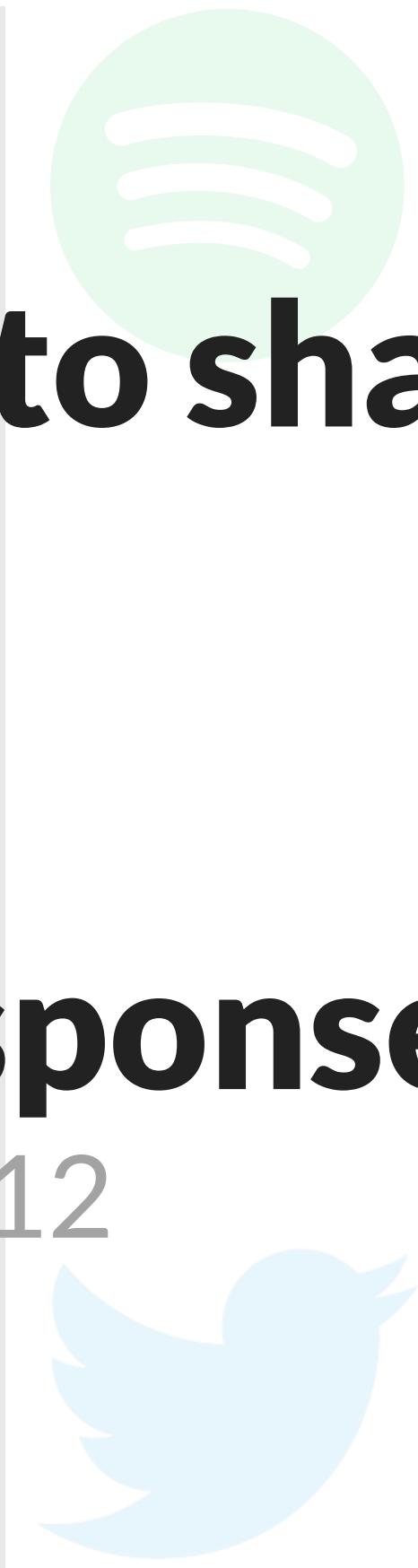


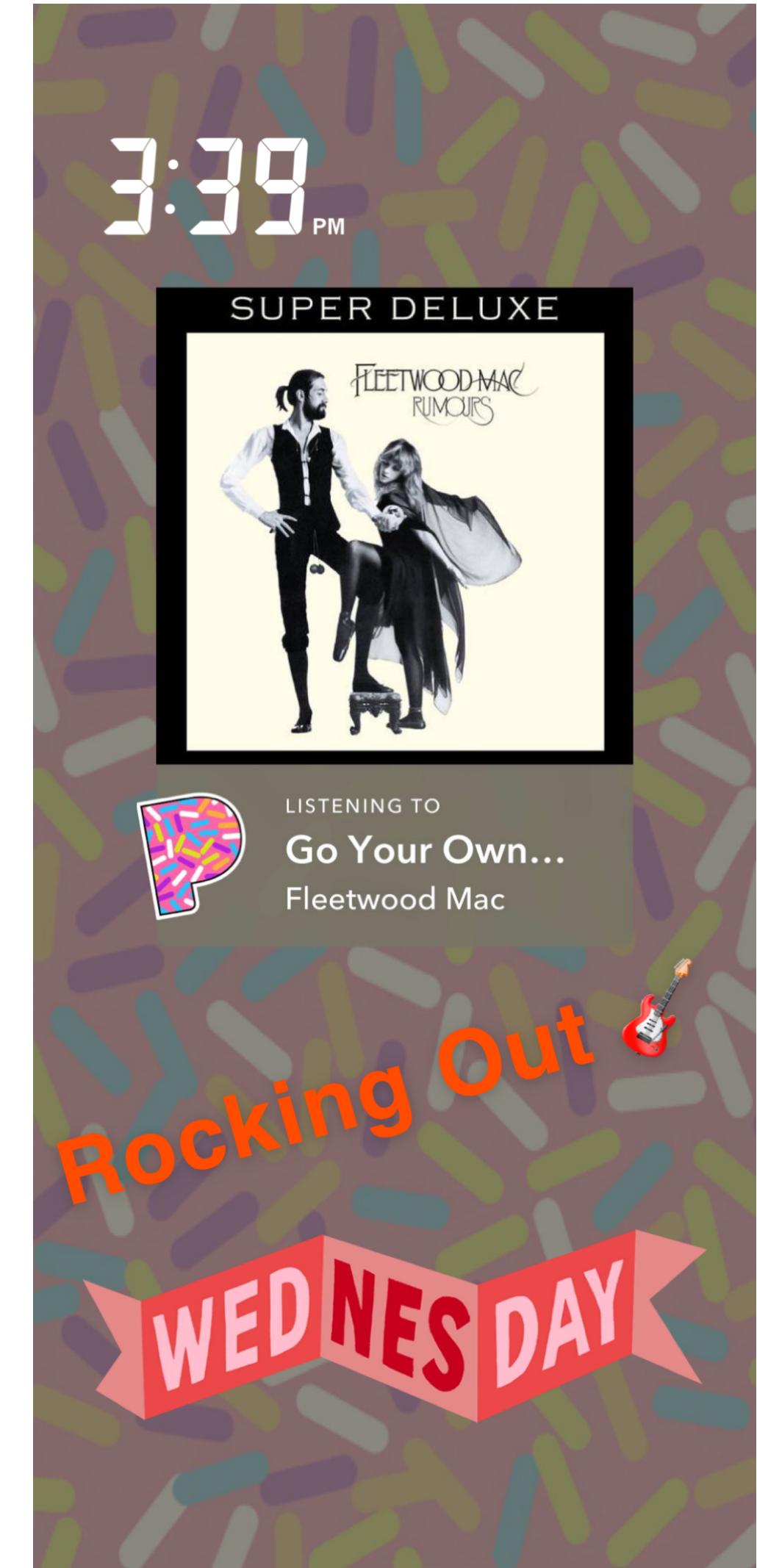
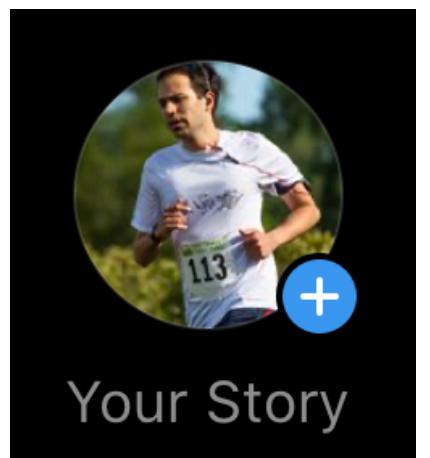
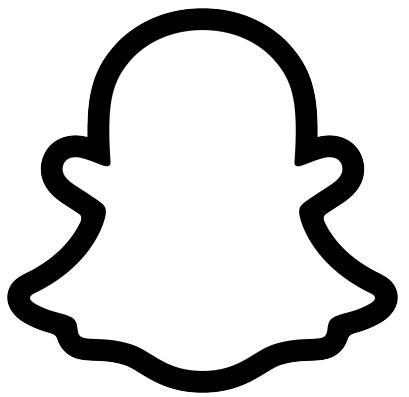
# People feel these moments are too trivial to share

Newman et al., CSCW 2011, Epstein et al., UbiComp 2013

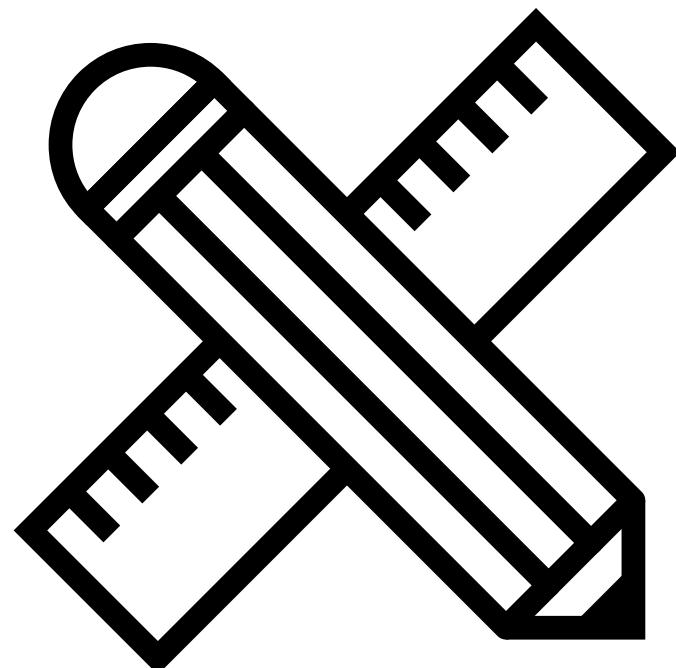
# These moments do not receive desired response

Liu et al., IMWUT 2017, Munson & Consolvo, PervasiveHealth 2012





# How can ephemeral platforms support sharing personal informatics data through stickers?

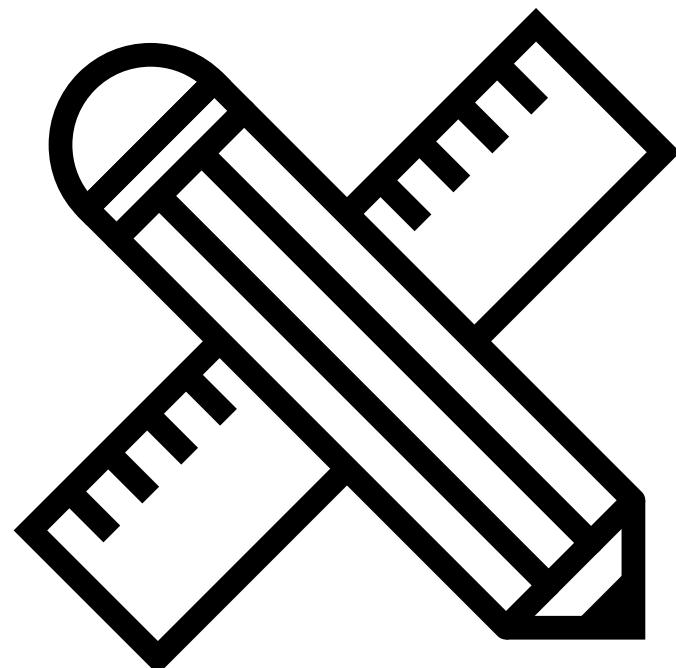


Design  
activities



Online  
survey

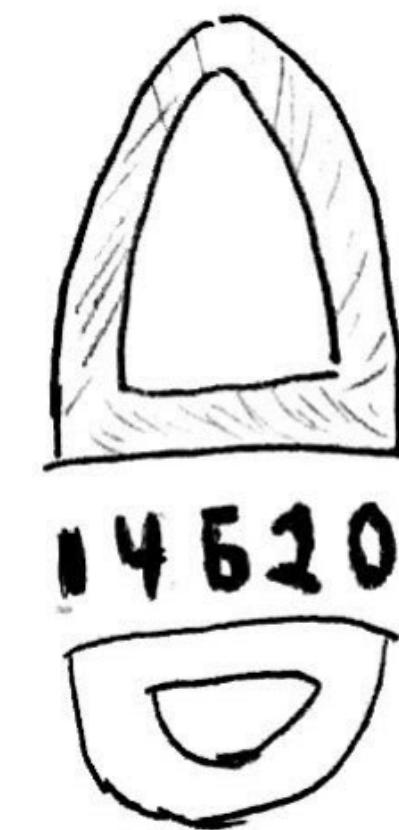
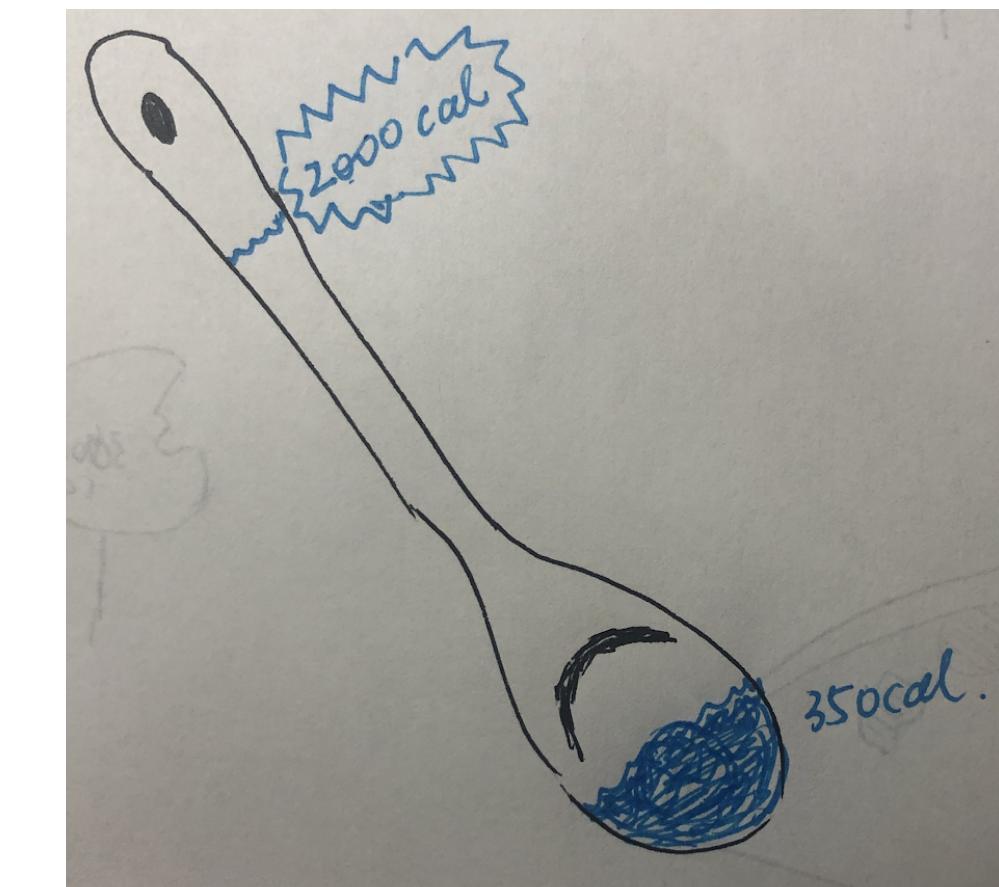
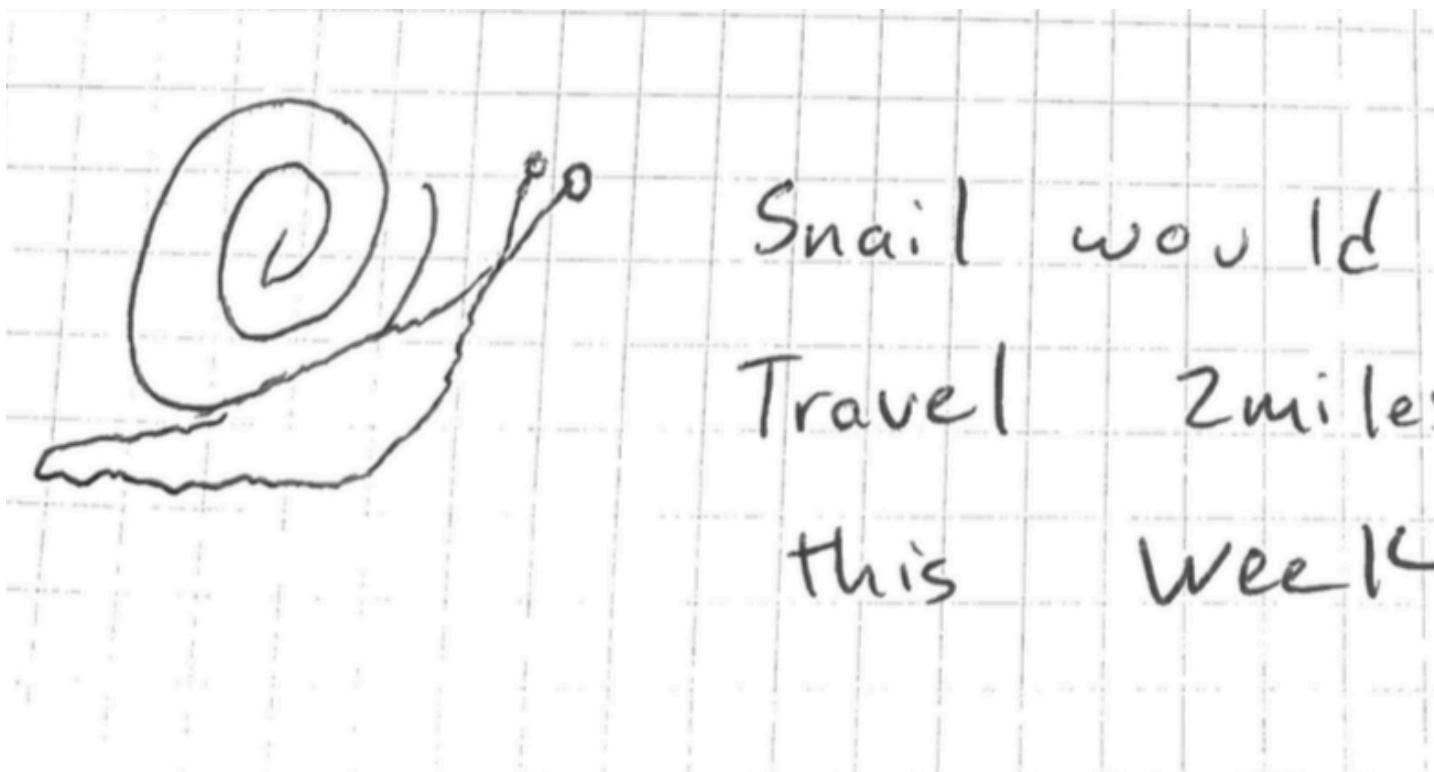
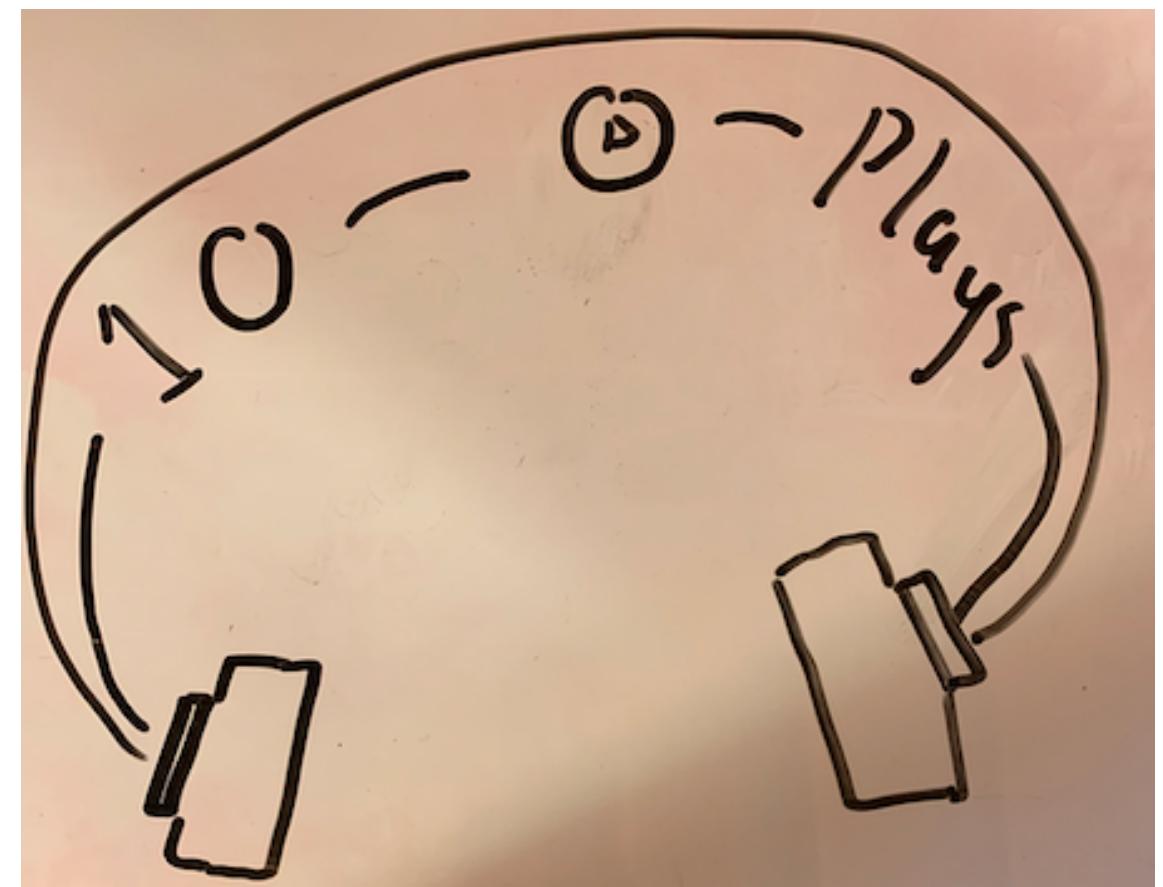
# How can ephemeral platforms support sharing personal informatics data through stickers?



Design  
activities



Online  
survey



## Badge



Commercial  
applications

Munson & Consolvo,  
PervasiveHealth 2012

## Embellished



Bateman et al.,  
CHI 2010

Borkin et al.,  
TVCG 2013

## Analogy

~150 calories  
**532 calories**  
**3.5 x a**  
**chocolate**  
**chip cookie**



Hullman et al.,  
TVCG 2011

Bentley et al.,  
TOCHI 2013

**Domain-relevant**

## Badge



**Domain-irrelevant**

## Embellished

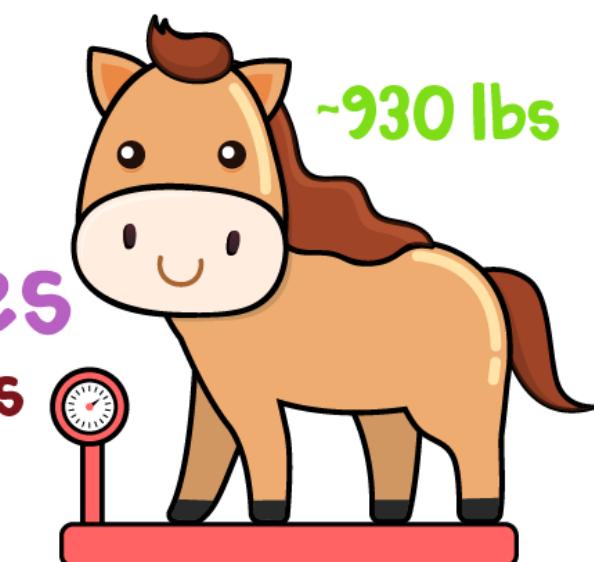


## Analogy

**532 calories**  
3.5 x a chocolate chip cookie



**532 calories**  
0.6 calories per pound of a horse



# How can ephemeral platforms support sharing personal informatics data through stickers?



Design  
activities



Online  
survey

## Analogy



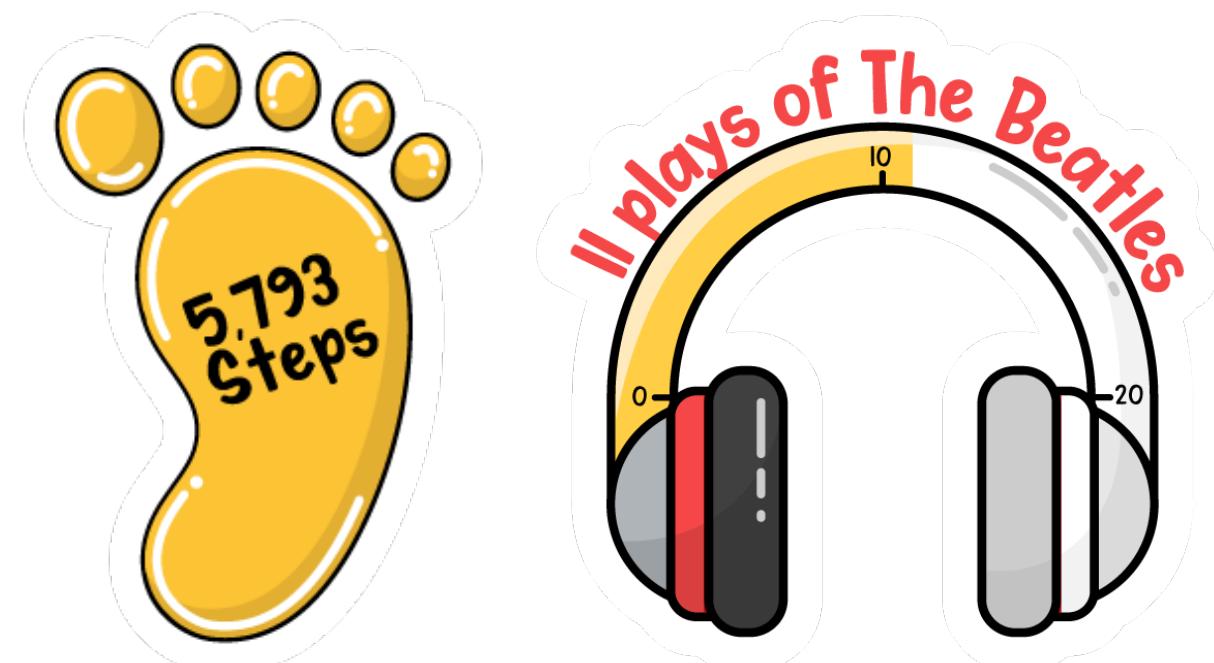
## More informative

(p<0.01, 95% CI 0.06-0.44 higher on a 7-point Likert scale)

Helped contextualize amounts

*"The information in the sticker is really interesting; really puts that distance in perspective"* (p66, 11 others)

## Badge Embellished



Better for highlighting accomplishments

*"The sticker itself is honestly very motivating because of the way it displays progress"* (p121, 10 others)

## Domain-relevant



## Domain-irrelevant



### More entertaining

(p<0.01, 95% CI 0.22-1.13 higher on a 7-point Likert scale)

### Higher intention to use

(p<0.05, 95% CI 0.10-1.01 higher on a 7-point Likert scale)

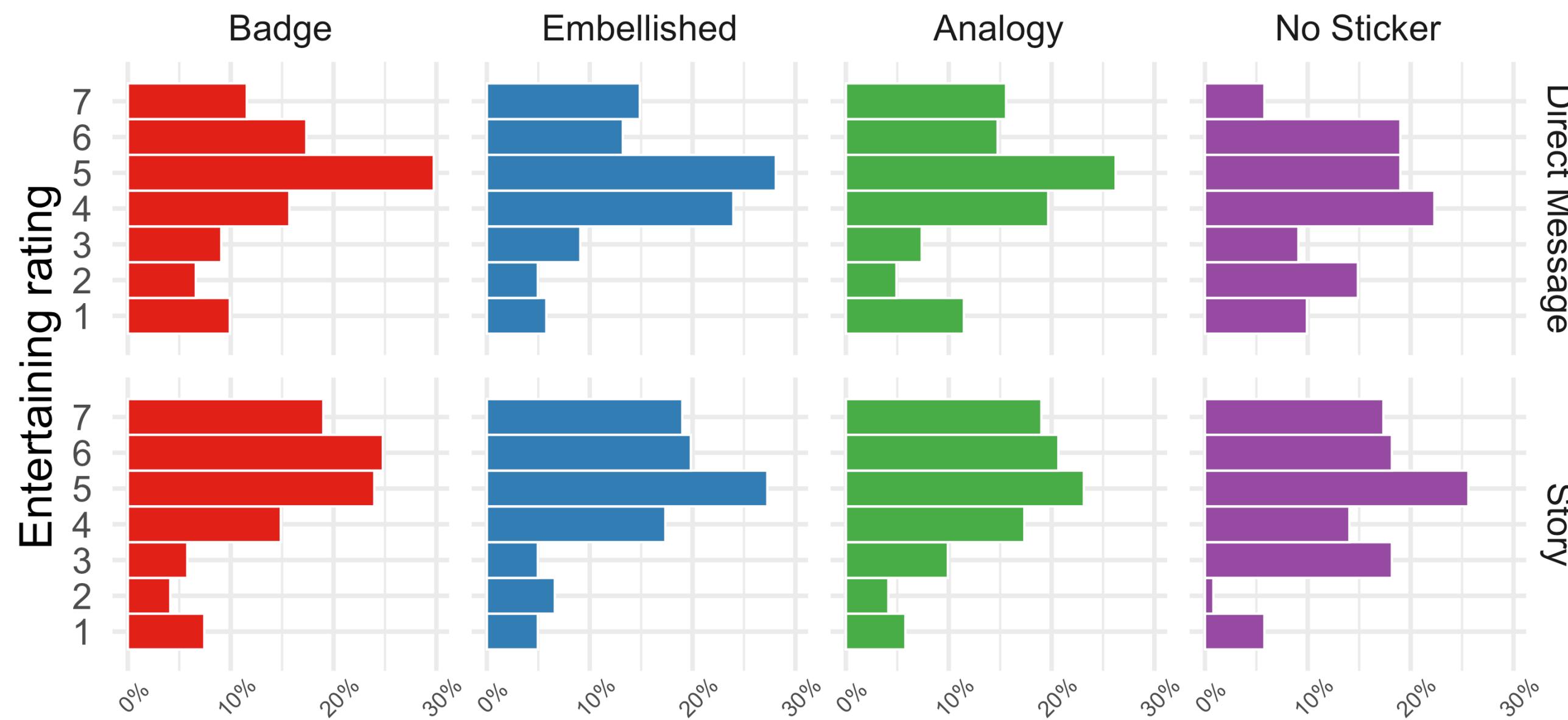
### Occasionally playful

*"This is a funny and rather amusing snap.*

*The fact that it uses such an absurd comparison  
is appealing to me"* (p270, 5 others)

### But hard to relate to

*"I don't really like this sticker. It's a temperature gage  
which has nothing to do with my progress"* (s86, 24 others)



**More informative with stickers than without**

( $p < 0.001$ , 95% CI 0.06-0.57 higher on a 7-point Likert scale)

**More entertaining than stickers than without**

( $p < 0.001$ , 95% CI 0.07-0.56 higher on a 7-point Likert scale)

*“This seems very boring now without the sticker!” (c68, 43 others)*

# Discussion

- Ephemerality can potentially ameliorate challenges people face when sharing personal informatics data
- Platforms should likely support a combination of sticker types
- Flexible creation of stickers is an open challenge

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[epstein@ics.uci.edu](mailto:epstein@ics.uci.edu)



**532**  
**calories**  
3.5 x a  
chocolate  
chip cookie

