

“THOUGHTS & PRAYERS” OR “📶 & 🙏”:
How the Release of New Reactions on CaringBridge Reshapes
Supportive Communication in Health Crises

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TALK STRUCTURE



1

Introduction & prior work in **emoji reactions**

2


Survey & interview **methods** to understand the product release

3

Findings: **major design tensions**

4

Design implications for improved computer-mediated communication in health crises

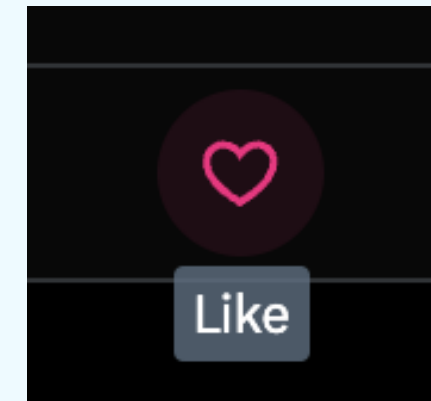


Reactions

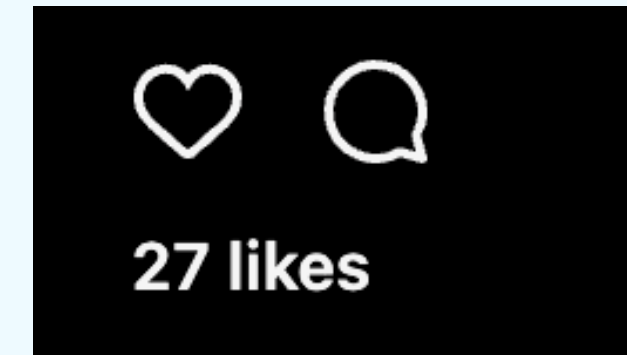
- Emoji reactions as **Paralinguistic Digital Affordances**
(Hayes et. al, 2016)
- Meaning of "**Likes**" highly varied in different contexts
(Scissors 2016)
- Often "**phatic**" communication that lacks substance
(Malinowski 1972, Miller 2008)

Reaction Styles

- “Single-Option, Single-Click”

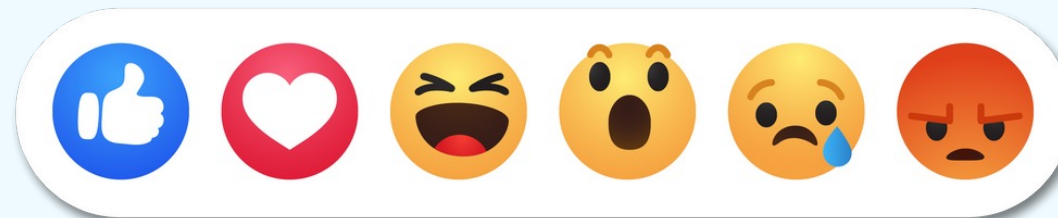


Twitter/X

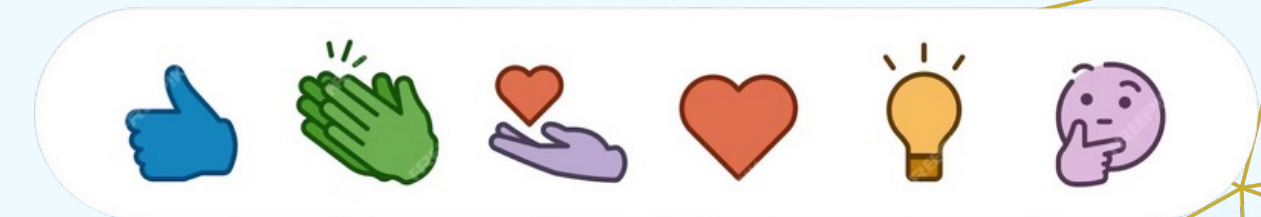


Instagram

- “Limited-Bar”



Facebook

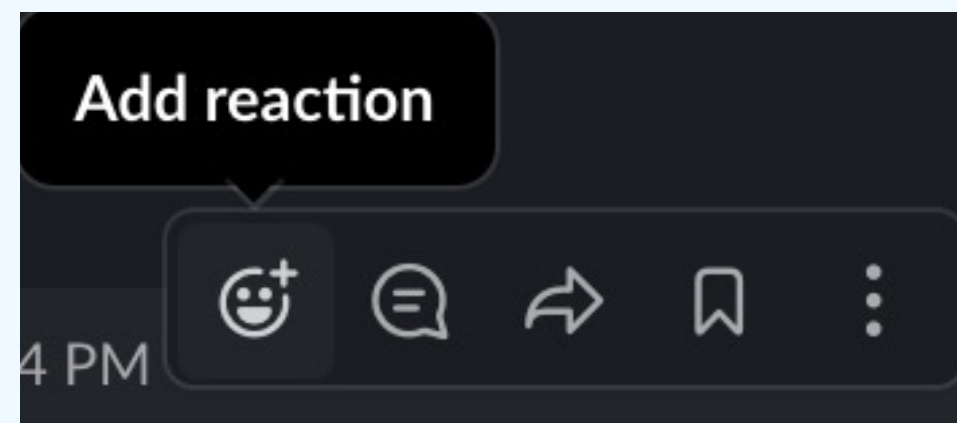


LinkedIn

Facebook Reactions: Ekman & Cordaro's theory of human emotions
(Wisniewski et. al., 2020)

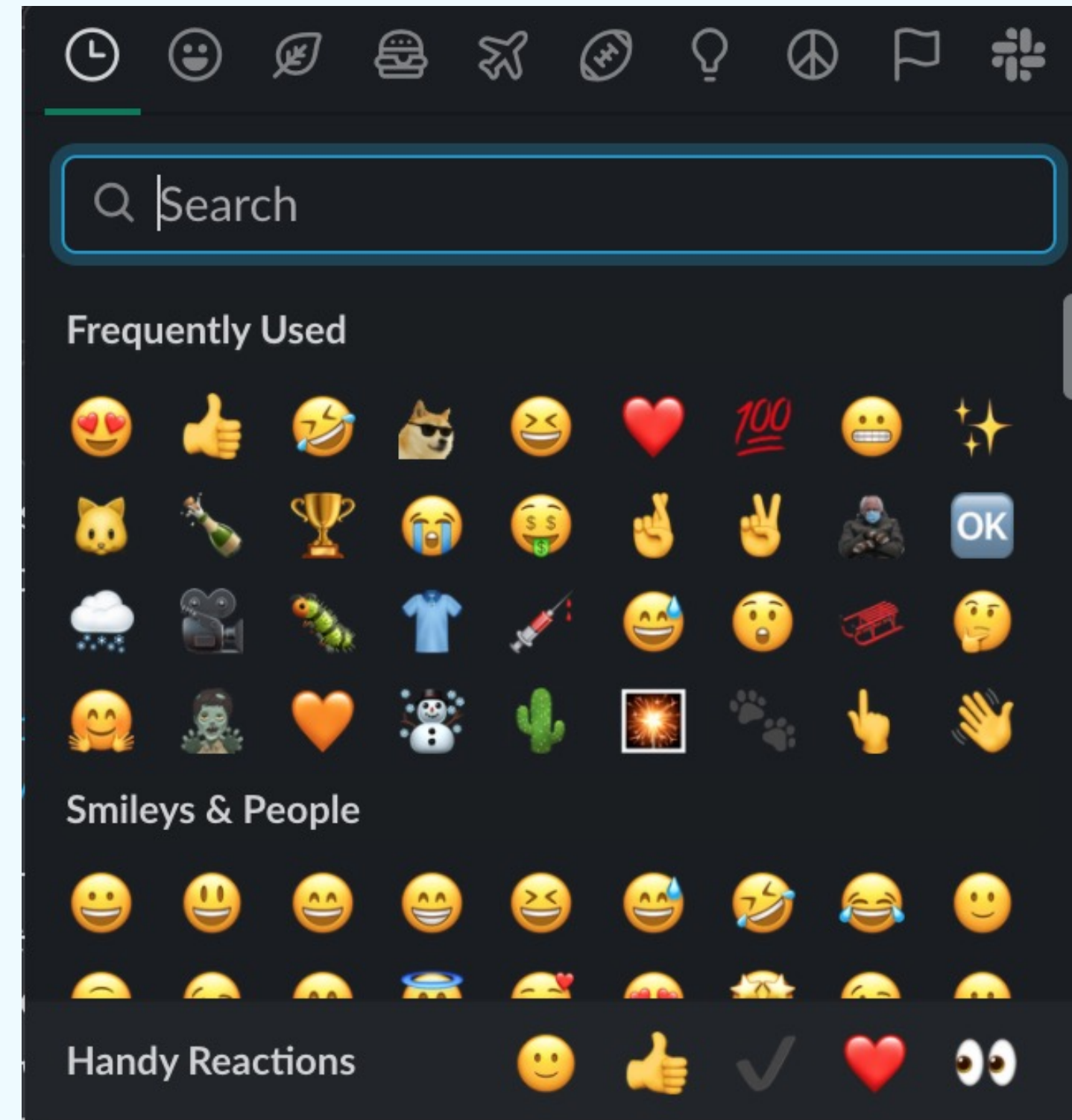
Reaction Styles

- “Free-for-all”



Slack

- ...and more



CARINGBRIDGE.ORG

- Non-profit established in 1997
- Niche health blogging platform
- Free “**Journals**” written by patient and caregiver **authors**
- Subscription by friends & family
- **Over 40M** unique users annually



- The **Company Logo**
- Introduced as a “**Reaction**” in 2012
 - (Facebook “Like” was 2009)



My Account



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APR
22
2015

April 22, 2015

Journal entry by [REDACTED] — Apr 22, 2015

Welcome to the Caring Bridge site for our friend and sister in Christ, Chris.

I haven't done this before, so if you have any advise for me, let me know!

In March, Chris became sick with abdominal pain and it was discovered that she had a mass on her uterus. She was refered to a specialist in St Paul to remove the tumor at the end of March. The cancer was identified as an Endometrial Stromal Sarcoma. Within a week, she was back in the hospital with complications from the surgery and it was noted that there were some nodules on the base of her lungs. She had further imaging, and biopsy showed that the sarcoma had spread to lungs making this a stage 4 high grade type of cancer. Her doctor was quite concerned because she had 2 separate CT's of the abdomen and pelvis (which includes the base of the lungs) about 3 weeks apart. The second scan showing nodules which were not there previously.

[REDACTED] | Jun 9, 2015

Christine please know I am thinking about you and praying that your journey home will be peaceful and painless. You are one of my oldest friends, we met at CCD! We were just 14 and I remember you as a confident, intelligent, and funny girl. and boy could you squeeze a dollar! I still don't know anyone who can stretch a dollar like you! Our lives have gone in different directions but have paralleled in so many ways! I wish your family peace and joy in the knowledge that you will be with God. I will miss you. I love you.



1 Heart



Reply

[REDACTED] | Jun 9, 2015 (edited)

Thank you, [REDACTED] for creating this journal for Chris.



Reply

[REDACTED] | Jun 9, 2015

Chris...may God bring you a miracle. Thanksgiving and Christmas are not the same with out you. [REDACTED]



3 Hearts



Reply

[REDACTED] | Jun 9, 2015

Chris, we've had so many adventures together! Riding Segways, camp Lebanon, movies and music in the parks, talking about the Church and many, many more. I believe you are personally responsible for teaching the entire Holy Family parish cards! I Love you so much! You are such a great witness to our Faith. You have taught me and many others so much through your actions and prayers. I am praying for you and your family! Peace be with you my dear sister in Christ!!! <3



Reply

[REDACTED] | Jun 9, 2015

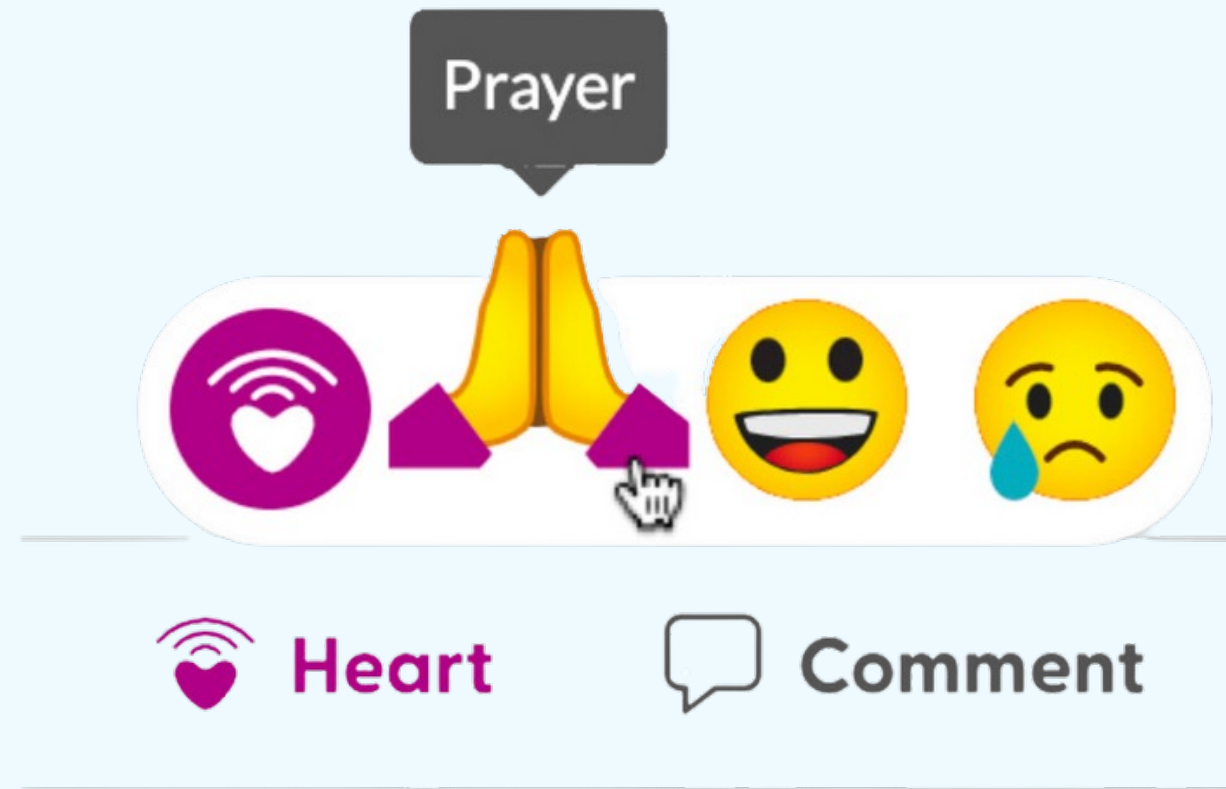
Loving prayers for you Chris.



Prayer & Spiritual* Support

- **Prayer: Most frequent and most important** form of support exchange on CaringBridge (Smith 2020)
- **Spiritual Support:**
 - **Underlies** many forms of care and support
 - **Interfaces can represent belief systems** to improve support exchange (Smith 2021)

*Note: Religion and spirituality are not synonymous, talk to me later about this!



- Custom-branded CaringBridge **Reactions** released in January 2021, including a distinctive **“Prayer”** option
 - Explicitly modeled after Facebook Reactions (2016)

Major Research Question

How does expansion from the “**single-option single-click**” Heart reaction into a “**limited-bar**” of four choices impact users’ perceptions of reacting on CaringBridge?



METHODS

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TWO-PHASES OF DATA COLLECTION



Survey: N = 808

54% authors ~ 67% Christian ~ 85% female ~ 50% 45-65yo

Strict
Opt-In
Subset

Interviews: N = 13

54% authors ~ 54% Christian ~ 85% female ~ 46% 45-65yo



FINDINGS

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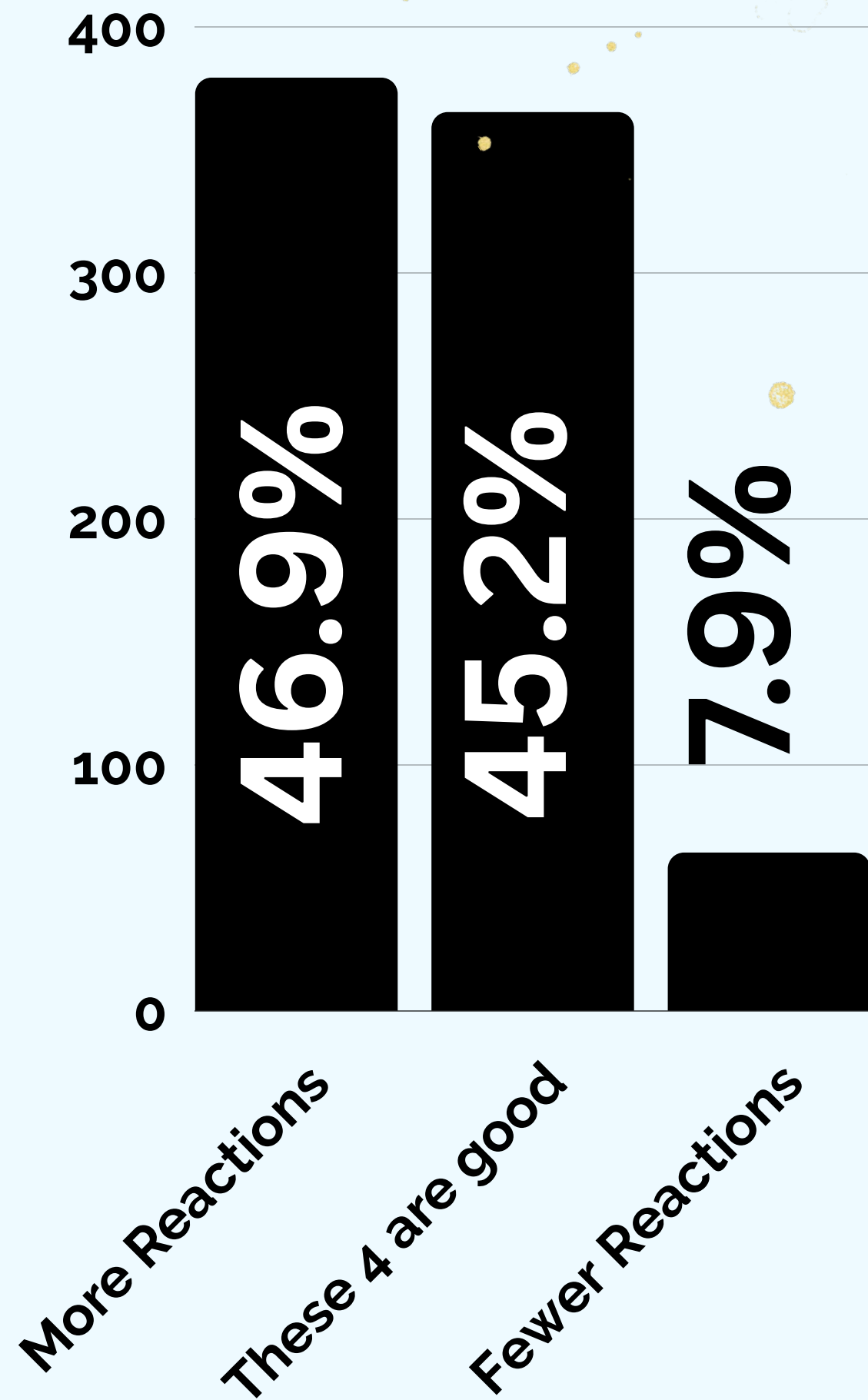
Design implications for improved
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ORIGINAL REACTION STYLE: SINGLE-OPTION, SINGLE-CLICK

- **Simple** interface
- Understood **unambiguously** as acknowledgement & support
- **Universally applicable** without risk of misinterpretation
- **More meaningful** than “Likes” because of the special CaringBridge context



**>90% of users
accept the new
reactions (or
want more)**

...but there are issues!

●

Increase in
interface
complexity

●

Functional
ambiguity

- Does the reaction show...
- visitor's own emotion?
 - empathy with author?
 - attempt to improve author's emotions?

●

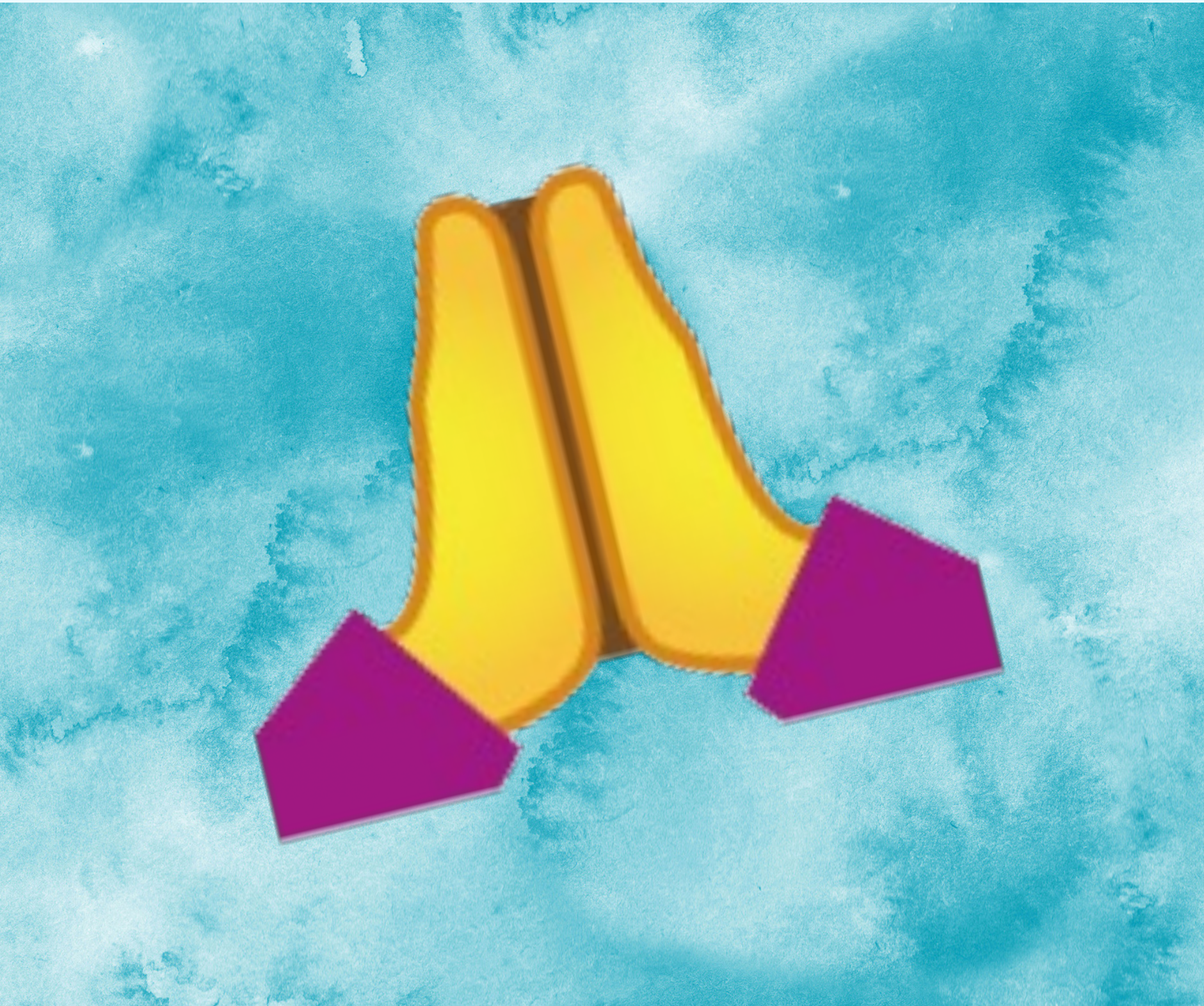
Semantic
ambiguity

- Symbols have multiple meanings
- These meanings may overlap.

●

Elevates inclusion for
many users;

Introduces major
exclusion and offense
for others, e.g., race &
religion



Reducing Redundancy, Increasing Efficiency

“

When I want to express that I care, but don't want to keep **repeating myself** with 'prayers and thoughts' (Visitor)



Unmet expectations

“

I would love to get this reaction because it would mean that people see something positive in his recovery. **I'm afraid I will never see this reaction since I now believe he will likely die within the next year.** (Author)



Keep CaringBridge Special

“

We chose CaringBridge because it's not social media. I think a lot gets lost in reactions or different emojis. It makes it not as meaningful. **Making CaringBridge more like Facebook would seriously make me consider not using it.** (Author)



Literacy & Authenticity

“ No more of these please. We are becoming an increasingly illiterate society. **Surely people can write “I am so sorry for your troubles” instead of poking a cartoon face.** (Author)



DESIGN IMPLICATIONS



1

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Was the reactions launch a good idea?

Think carefully before complicating a niche platform to keep up with the tech giants.

Design Implications

Assuming CaringBridge retains the limited-bar:

- Reduce ambiguity
- Improve inclusivity
- Help authors communicate preferences

Reduce ambiguity

Gesture- rather than emotion-based reactions

• E.g.,



Heart, Prayer, Hug, Flowers , Candle, Clap

(Commonly suggested by participants)

Improve inclusivity



Enable “Out-Out” for specific (or all) reactions



Improve inclusivity & Help authors communicate preferences

How would you like to enable your visitors to react?

Choose any five reactions you'd like to receive, in addition to 📶:

Spiritual



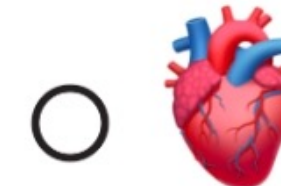
Gestures



Nature



Medical



Help authors communicate preferences

Existing Feature: Generic nudge

Patients and caregivers love hearing from you; add a comment to show your support.

Heart Comment

Did you know? A quick comment, no matter the situation (positive or negative), can boost morale by 28.2%.

Write a comment...

Post

Help authors communicate preferences

Improved Feature Possibility: Author-configured nudge

- **It would mean a lot to [Name], to know that you are praying!** Send her some 🙏, or leave a comment.
- **[Name] would really appreciate your comments below!** Words say it best, even if you only have a few.
- **Now is a time for quiet.** Please send 🌸 and 📶.
- **[Name] could use a pick-me-up.** Share a hopeful message or a pleasant memory you have with her.

QUESTIONS?



EstelleSmithPhD



hci.social/@estellesmith