One Wug Or Two?
Or How I Started Thinking About Empathy, Feelings and what that means about VUI Design Thinking

Damien Dabrowski
Conversational Interaction 2020
Setting Expectations

• The problem VUI design and empathy

• The culture of technology design and HCI

• The difficulty of empathy as a mental and physical construct

• The difficult job of designers to make decisions on behalf of users

• The responsibility of VUI designers
Who?

• VUI Designer @ Amazon
• Linguist
• Canadian
• Bike Racer
This is a WUG
Now there is another one.
There are two of them.
There are two _____.
English Plural

/s/
/s/  surface representation

Cat > Cats [s]
Dog > Dogs [z]
Fox > Foxes [lz]
Now there is another one.
There are two of them.
There are two ______.
https://azuremagazine.com/article/elizabeth-dori-turnstall-ocad/

That's me, short hair. Smile. Cane. Those are my words. Aren't captions glorious? Let's just stop for a second and...
**empathy**  

**NOUN**  

[**mass noun**]

The ability to understand and share the feelings of another.

[+ Example sentences  [+ Synonyms]

**Usage**

People often confuse the words empathy and sympathy. Empathy means ‘the ability to understand and share the feelings of another’ (as in both authors have the skill to make you feel empathy with their heroines), whereas sympathy means ‘feelings of pity and sorrow for someone else's misfortune’ (as in they had great sympathy for the flood victims)

**Origin**

Early 20th century: from Greek empatheia (from em- ‘in’ + pathos ‘feeling’) translating German Einfühlung.

[https://en.oxforddictionaries.com/definition/empathy](https://en.oxforddictionaries.com/definition/empathy)
**empathy**

**NOUN**

*mass noun*

The ability to understand and share the *feelings* of another.

+ Example sentences  + Synonyms

**Usage**

People often confuse the words empathy and sympathy. Empathy means ‘the ability to understand and share the feelings of another’ (as in both authors have the skill to make you feel empathy with their heroines), whereas sympathy means ‘feelings of pity and sorrow for someone else's misfortune’ (as in they had great sympathy for the flood victims)

**Origin**

Early 20th century: from Greek empatheia (from em- ‘in’ + pathos ‘feeling’) translating German Einfühlung.

[https://en.oxforddictionaries.com/definition/empathy](https://en.oxforddictionaries.com/definition/empathy)
feeling

NOUN

1 An emotional state or reaction.
   ‘a feeling of joy’

   + More example sentences  + Synonyms

1.1 (feelings) The emotional side of someone’s character; emotional responses or tendencies to respond.
   ‘I don’t want to hurt her feelings’

   + More example sentences  + Synonyms

1.2 [mass noun] Strong emotion.
   ‘God bless you!’ she said with feeling’

   + More example sentences

2 An idea or belief, especially a vague or irrational one.
   [with clause] ‘he had the feeling that he was being watched’

https://en.oxforddictionaries.com/definition/feeling
Einfühlung
System 1
- fast
- instinctive
- emotional

System 2
- slow
- deliberative
- logical
Einfühlung
The Speech Chain, Denes and Pinson, 1993
“Common Sense” ideas of language
“Common Sense” ideas of language

• Language = communication

• Words have meanings

• People understand how and why they use language, and how and why they respond to it
“Common Sense” ideas of language

Test 1
“Common Sense” ideas of language

Test 1
“Common Sense” ideas of language

Colorless green ideas sleep furiously.

“Common Sense” ideas of language

Test 2
“Common Sense” ideas of language

https://www.youtube.com/watch?v=ybcvlxjvscw
“Common Sense” ideas of language

...like a roardinary chresentence of a mariating follarow.
“Common Sense” ideas of language

Test 3
“Common Sense” ideas of language

Test 3
“Common Sense” ideas of language

Wikipedia, African Bush Elephant
“Common Sense” ideas of language

© Bill Watterson/Universal Uclick
“Common Sense” ideas of language

Involuntary
empathy?
“Information is defined as the ability to make nonrandom selections from some set of alternatives. [...] If the signals were to arrive at the receiving end, and the set of alternatives were damaged or missing, the proper selections could not be made. The signals have no ability to bring the alternatives with them; they carry no replica of the message. The whole notion of information as ‘the power to make selections’ rules out the idea that the signals contain the message.”

empathy

Figure 5.1 Saying cat

The Phonological Enterprise, Hale and Reiss, 2008
“…the conscious knowledge that speech can have a non-human origin is not enough for the brain to overcome the historically appropriate activation of social relationships by voice.”

involuntary processes
unconscious needs
“Common Sense” ideas of language

• Language = communication
• Words have meanings
• People understand the language they use (how & why)
“Common Sense” ideas of language

• Language = communication

• Words have meanings

• People understand the language they use (how & why)
“Common Sense” ideas of language

• Language = structure

• Contexts have meanings

• Language understanding is involuntary & unconscious
• Language = **structure**

• so it’s easy to hide things in words, which we think we can interpret correctly

• **Contexts** have meanings

• based on **shared and agreed-upon understanding**, which a **machine can’t do**

• Language understanding is **involuntary** & **unconscious**

• **making empathy challenging**
cognitive processes
cognitive needs
Input from

- don’t look like you
- don’t talk like you
- speak other languages
- from somewhere else
- are marginalized

Feedback from

- no vested interest
- know better
- disagree with you
- have a different POV
- are outside of your team
This is a WUG

fin
damiendabrowski.design