

“ethics of justice and care, the ideals of the human relationship - the vision that self and other will be treated as of equal worth, that despite differences in power, things will be fair; the vision that everyone will be responded to and included, that no one will be left alone or hurt.”

Carol Gilligan, *In A Different Voice*

# CARING TECHNOLOGIES: DESIGNING FOR TRUST AND CARE

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**INTRODUCTION:WHAT IS CARE?**

**CARE + COMMUNITY + THE ECONOMY**

**EXERCISE: AUTOETHNOGRAPHY (10 MINUTES)**

**UNDERSTANDING THE RELATIONSHIPS BETWEEN  
CARE AND COMPUTING**

**DISRUPTIVE POSSIBILITIES FOR CARING SYSTEMS**

**EXERCISE: STORYBOARDING (20 MINUTES)**

WHO AM I AND WHY AM I TALKING TO YOU ABOUT THIS?

PREVIOUSLY: HUMAN-COMPUTER  
INTERACTION RESEARCHER @ UW

USER EXPERIENCE DESIGN/RESEARCHER

IN THE TECH INDUSTRY 10 YEARS

PRIMARY CAREGIVER FOR 5

HUMANS REQUIRE MORE CARE  
THAN ANY OTHER SPECIES



*LET'S DEFINE CARE  
BROADLY-*

CARE IS THE WORK OF  
ATTENDING TO EXPRESSED  
OR ANTICIPATED NEEDS

(including: other humans',  
your own, or those of the  
environment or society)



## **WHAT IS CARE?**

**CARING GENERALLY TAKES ON THREE FORMS:  
INSTRUMENTAL, EMOTIONAL, AND INFORMATIONAL:**

**INSTRUMENTAL HELP INCLUDES ACTIVITIES SUCH AS  
SHOPPING...**

**EMOTIONAL SUPPORT MAY INCLUDE LISTENING,  
COUNSELING, AND COMPANIONSHIP...**

**INFORMATIONAL... SUCH AS LEARNING HOW TO ALTER  
THE LIVING ENVIRONMENT OF SOMEONE IN THE FIRST**

DRENTEA, P. (2007). CAREGIVING. IN G. RITZER (ED.),  
BLACKWELL ENCYCLOPEDIA OF SOCIOLOGY. BLACKWELL  
PUBLISHING.



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COUNSELING, AND  
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## 1-on-1 Templates

[+ New Template](#)

**MY TEMPLATES**

- [Weekly Check-In](#)
- [Development Growth Plan](#)
- [Marketing Onboarding Template](#)

**GLOBAL TEMPLATES**

- [Coaching 1-on-1](#)
- [Monthly Check-In](#)
- [Quarterly Lookback](#)
- [6 Month Organization Culture Check](#)
- [Yearly Culture Review](#)

*Admins: Manage your organization's global templates in [1-on-1 Settings](#).*

**New 1-on-1 Template**

Create and run your own custom 1-on-1s. Templates you create will live in *My Templates*.

Name this template...

Question or topic

Add more details (optional)...

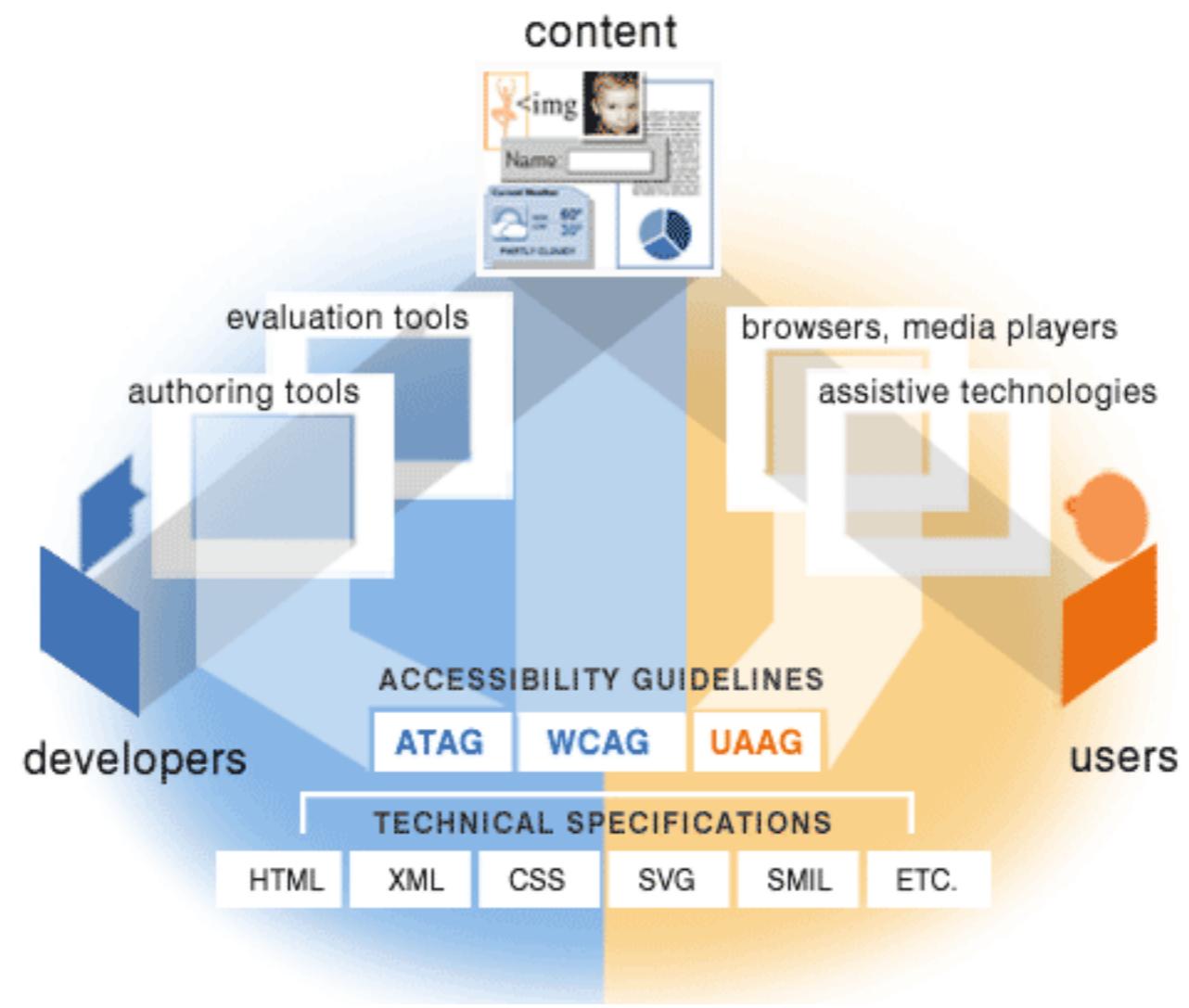
+ Add Question

ATTACHMENTS

Add documents that will be used to complement listed 1-on-1 questions

+ Upload Attachment

[Save Template](#) [Cancel](#)



# INFORMATIONAL...

MOST JOBS IMPLICITLY  
REQUIRE CARE WORK

70% OF POPULATION WILL REQUIRE  
LONG-TERM CARE IN ADULTHOOD



CARE IS THE  
CORNERTSTONE OF OUR  
ECONOMY  
(AND THE LARGEST  
MARKET FOR  
TECHNOLOGIES)

CAREGIVING IS  
PROJECTED TO BE THE  
LARGEST OCCUPATION  
IN THE U.S. BY 2020

# 81%

OF US JOBS ARE IN SERVICE-PROVIDING SECTORS,  
INCLUDING RETAIL, HEALTHCARE, EDUCATION,  
HOSPITALITY

# 67%

OF US ECONOMIC OUTPUT



CARE IS AN ISSUE FOR  
INTERSECTIONALITY



# GLOBAL CARE CHAIN

Folders

Name ↓

PPS Docs

Below are my initial thoughts:

- For stability's sake, I want Letty to be able to stay at the same school from kindergarten through 8th grade. This is not always possible, but there's a good chance we can work towards together. This means I am willing to look at schools outside of our neighborhood choices, just in case we go with a neighborhood school, committing to make it work.
- Short commutes for everybody! It would be nice if Letty could walk or bike to school from at least one of our houses. My preference would be to drive to the west side, where we have more options.
- Language Immersion. Letty has stated a preference for this. PPS has a Dual Language Immersion program, entry through 8th grade. Spanish would be the obvious choice, and Letty has been exposed to Spanish since she was born. She also speaks English like a native. Spanish is not her native language though. Letty has expressed a desire to attend the "Holleran Immersion", but this is not offered through PPS. She also said she wanted to attend the "Orenco Open House". Open houses are going to be happening soon, dates are unknown.
- Other PPS options: Buckner Arts, Sustainable Environment, the "Creative Sciences" school, the Ivy Public Montessori (which would start in first grade).
- I want your participation and input in this process as much as you like. You are welcome to task things up, suggest schools, figure out when the open houses/tours are, and the like.

READTHIS-P...

Kindergarten...



CARE IS INHERENTLY COLLABORATIVE  
+ OFTEN NECESSITATES COOPERATION  
+ "PROFESSIONAL SKILLS"

## AXIOMS FOR CARE AND TECHNOLOGY

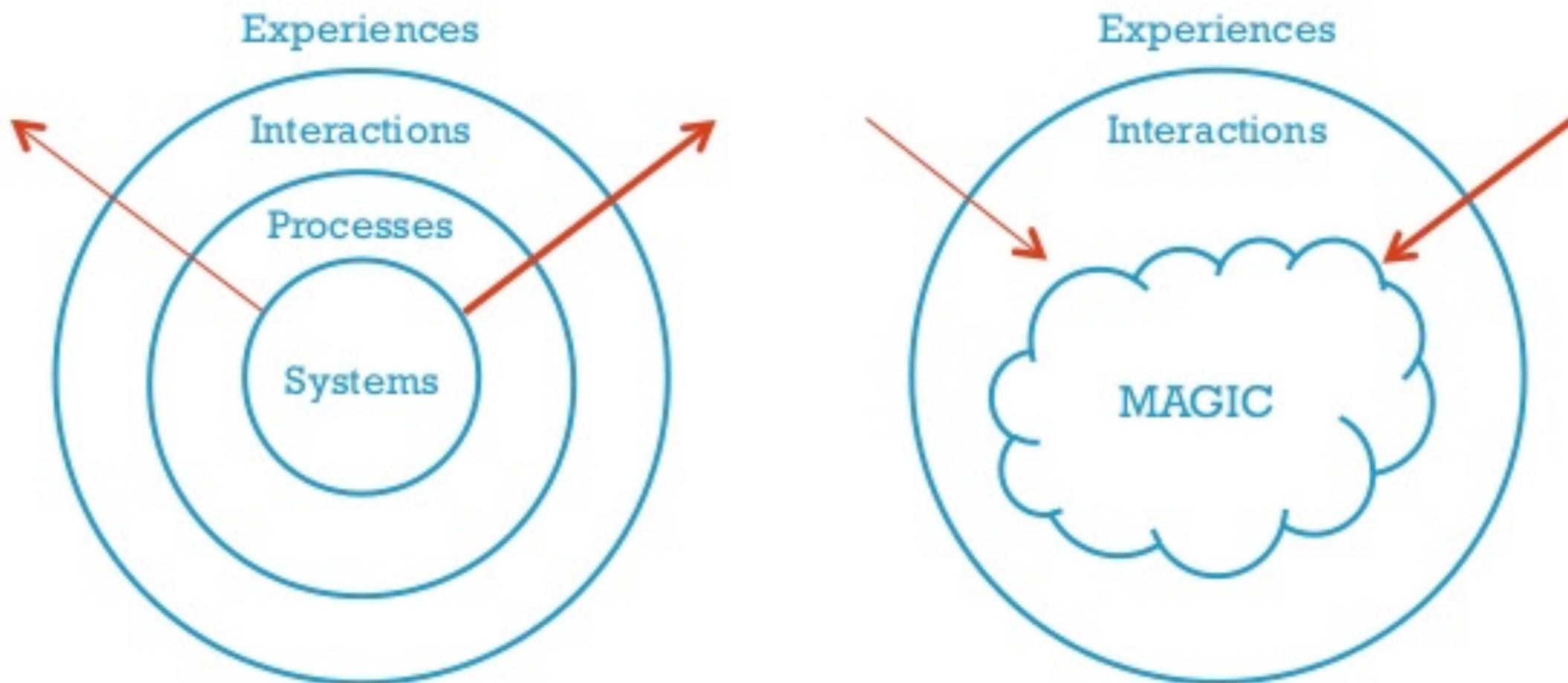
1. CARE CANNOT BE AUTOMATED
2. CARE IS NOT A PROBLEM TO BE SOLVED BY TECHNOLOGY, BUT RATHER A KEY HUMAN EFFORT TO BE SUPPLEMENTED BY IT
3. CARE IS PART OF EVERY HUMAN EFFORT, THUS IT IS RACIALIZED AND GENDERED AT GLOBAL POLITICAL ECONOMIC SCALE

5 + 5

RECALL A CARING INTERACTION OR SYSTEM  
THAT YOU HAVE EXPERIENCED RECENTLY.  
DESCRIBE IT IN 100 WORDS (OR LESS) OR  
SKETCH IT

**HOW DO WE START TO  
UNDERSTAND CARE AND  
COMPUTING?**

## Why design services?





FACEBOOK  
DOESN'T LOCK  
PEOPLE IN THE  
OFFICE, BUT IT  
COMES "AS CLOSE  
TO THAT AS WE  
CAN LEGALLY GET,"  
ZUCKERBERG SAID  
TO AN ERUPTION  
FROM THE CROWD.

*the number of content moderators scrubbing the world's social media sites, mobile apps, and cloud storage services runs to "well over 100,000"—that is, about twice the total head count of Google and nearly 14 times that of Facebook.*



-ADRIEN CHEN, “The Laborers Who Keep Dick Pics and Beheadings Out of Your Facebook Feed”, WIRED, 2014





*Apple Man is a fortysomething dad who just wants to FaceTime his adorable children while he's on a business trip, and also find a local pourover coffee shop while he's in town. Apple Man has an Apple Watch (obvious). He needs a way to manage his photos of his adorable children and hiking trips with friends. He loves jogging and mountain biking and wants to use his Apple Watch to monitor his workouts, because he LOVES working out. Apple Man is very fit for his age — you can just barely tell he's totally ripped through his light blue, off-the-rack, wrinkle-free, button-down shirt. Apple Man has a great head of hair. Apple Man owns his home and wants to be able to open his garage door from his phone to park his family-sensible-yet-sporty-crossover. (He's on the Tesla Model 3 preorder list.) He wants to make brunch plans, and it would be great if he could add a brunch plan to his calendar app directly from text messages. Apple Man wants to track his health, but of course he has no need for a period tracker. His calendar is full; his inbox is zero.*

-KATIE NOTOPOULOS, THE END OF  
APPLE MAN

## SOME APPLICATIONS OF CARE WORK IN TECHNOLOGY:

SHUTTLE BUS DRIVERS

CUSTODIANS

FOOD SERVICE WORKERS

CHILDCARE PROVIDERS

ELDER AND DISABLED CARE PROVIDERS

CLOTHING AND LAUNDRY WORK

+

MARKETING

EVENT PLANNING

SCHEDULING AND ADMINISTRATIVE WORK

CUSTOMER CARE AND SUPPORT



*Cafeteria workers at Intel earn an average wage of \$14.50 per hour... (they are) majority female and 78% Latino.*

*That's a stark contrast to Intel's direct workforce that, like much of the tech industry, is highly paid, overwhelmingly male (75.9%) and just 8.3% Latino.*

THE PREDICAMENT OF THE 36 YEAR-OLD LATINA  
TECHNOLOGIST

LATINAS COMPRISE LESS THAN 2  
PERCENT OF TECH WORKFORCE

+

50% ATTRITION RATE FOR WOMEN  
IN STEM AT 10 YEAR MARK

=

STATISTICALLY WAY MORE LIKELY  
TO BE CLEANING THE OFFICE THAN  
WORKING ON A PRODUCT TEAM

# RADICAL CARING: NEXT STEPS

CAN WE WORK  
FROM THE  
ASSUMPTION THAT  
WE ALL HAVE  
(VALUABLE)  
CAREGIVING  
RESPONSIBILITIES?



*So, in a political situation in which care is both exceptionally necessary and exceptionally underprovided, acts of care begin to look politically radical. To care is to act against the grain of social and economic orthodoxy: to advocate care is, in the present moment, to advocate a kind of political rupture. But by its nature, care must be a rupture which involves taking account of, centring, and, most importantly, taking responsibility for those for whom you are caring. Is providing care thus a valuable avenue of artistic exploration? Is the art of care a form of radical political art? Is care, in a society which devalues care, itself shocking?*

-Harry Giles, "Shock and Care"



20 MINUTES - IN GROUPS OF ~6

# STORYBOARD CARING INTERACTIONS

E.G. COMMUNICATING WITH ANOTHER CAREGIVER,  
REQUESTING ASSISTANCE



# UX NIGHT SCHOOL

THANK YOU!  
<3 @AMELIAABREU

LET'S WORK TOGETHER!

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