# Calm Technology Machine Learning and Metadata

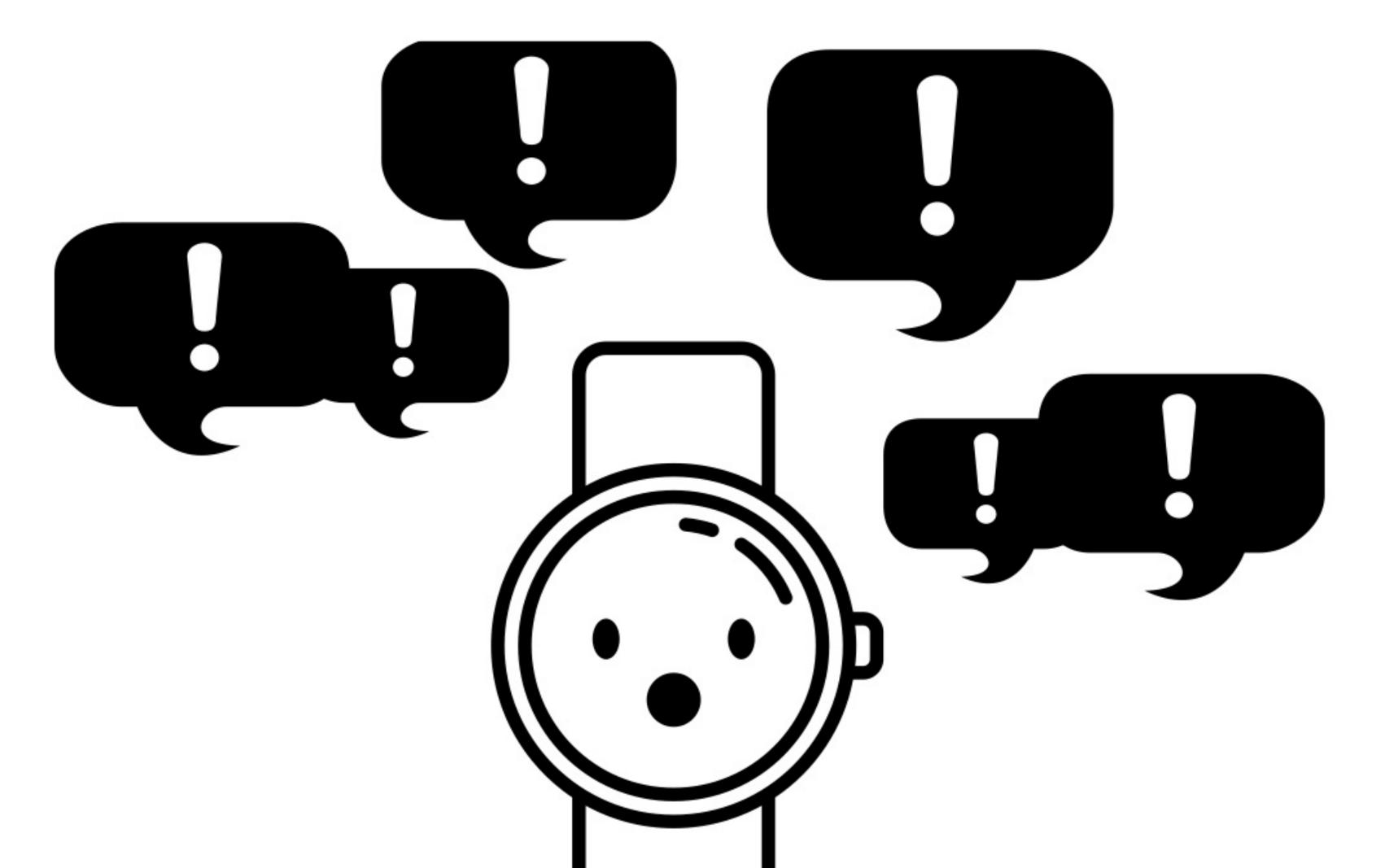
Amber Case | @caseorganic Research Fellow, Harvard Berkman Klein Center | MIT Media Lab Smart Content West | LA | 3 Mar 2017 calmtech.com

# 50 billion devices will be online by 2020. -Cisco

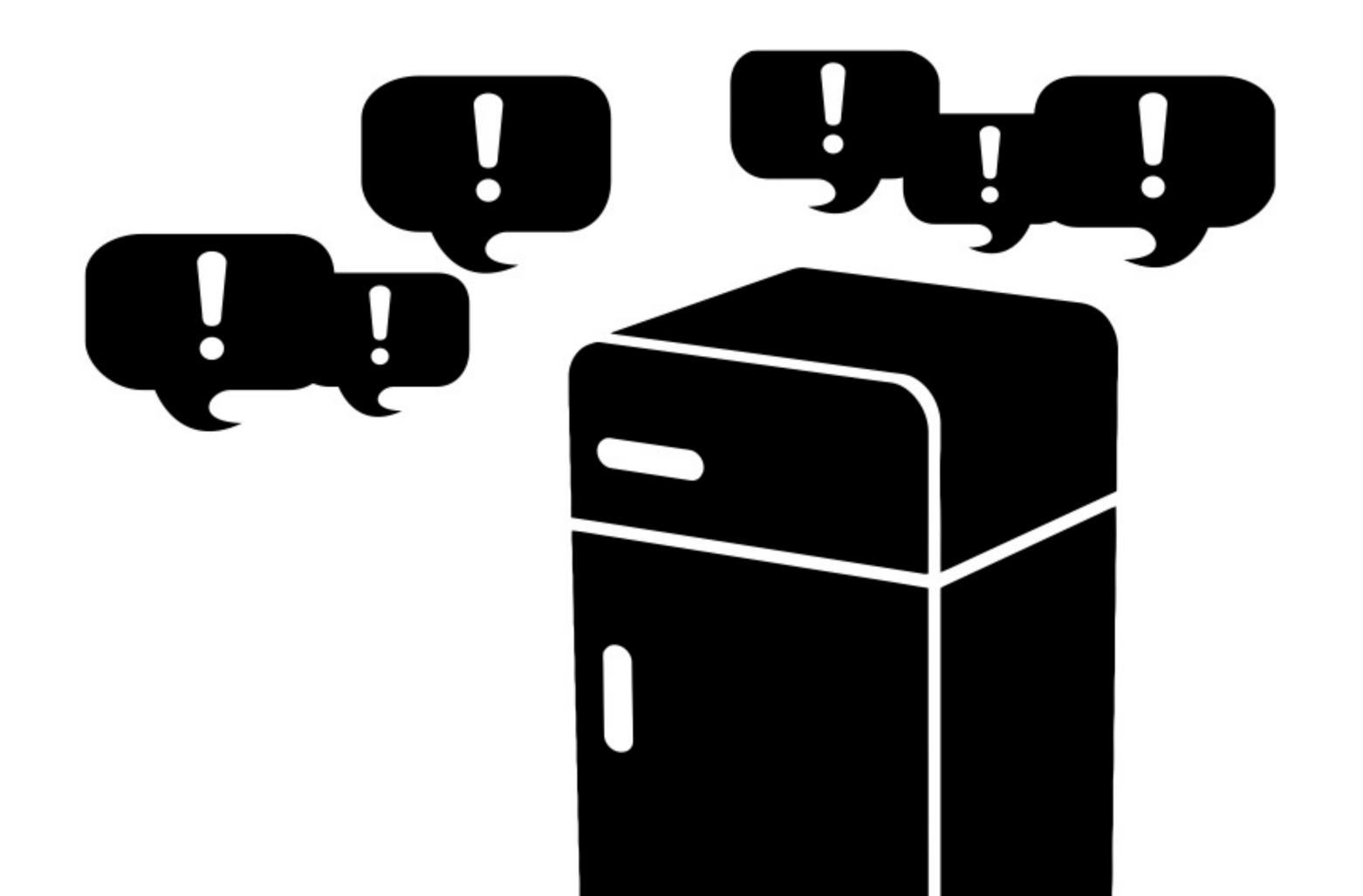
# Sound good?

## Consider...

### The "Smart" Watch



## The "Smart" Fridge



### The Dystopian Kitchen of the Future



caseorganic.com

### Connected Animals



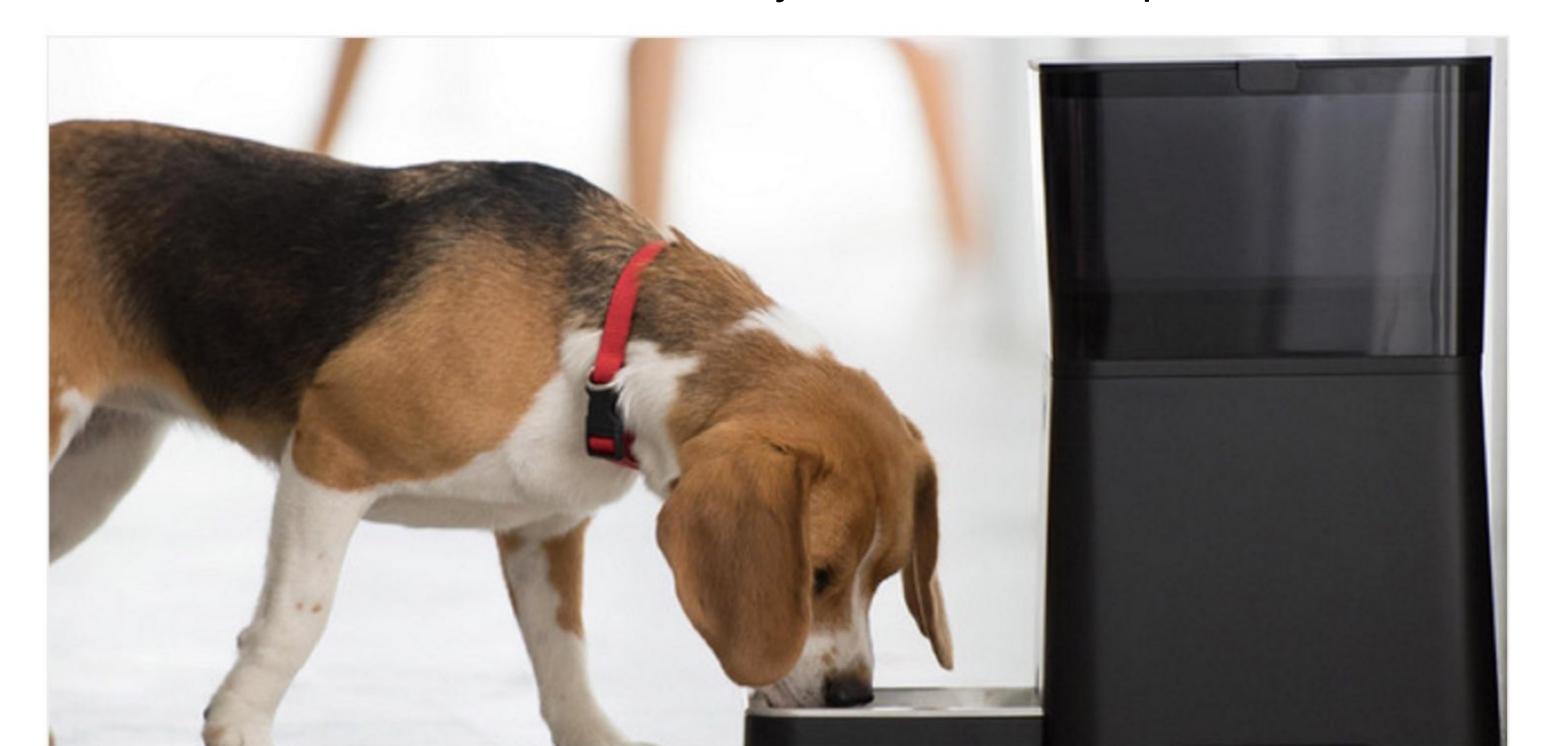
### The new Schrödinger's Cat



Data Center > Cloud

### Cats, dogs starve as web-connected chow chute PetNet plays dead

Failure forces humans to 'manually' feed ravenous pets



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### RELATED TO YOU OR YOUR PET.

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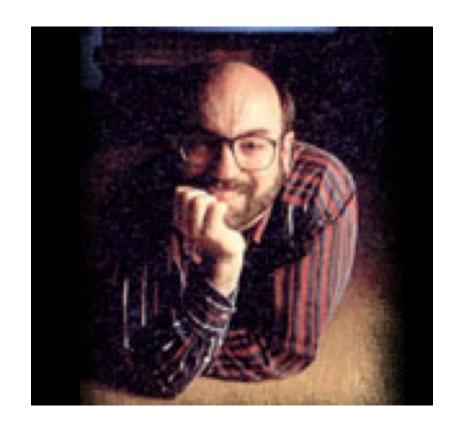
Source: http://readwrite.com/2016/08/01/petnet-shows-happens-iot-fails-dl1/

# An era of interruptive technology

# We need a Calm Technology

### XEROX PARC: mid-90s

Mark Weiser



John Seeley Brown



# THE COMING AGE OF CALM TECHNOLOGY<sup>1</sup>

Mark Weiser and John Seely Brown

Xerox PARC

October 5, 1996

#### INTRODUCTION

The important waves of technological change are those that fundamentally alter the place of technology in our lives. What matters is not technology itself, but its relationship to us.

# Designing Calm Technology

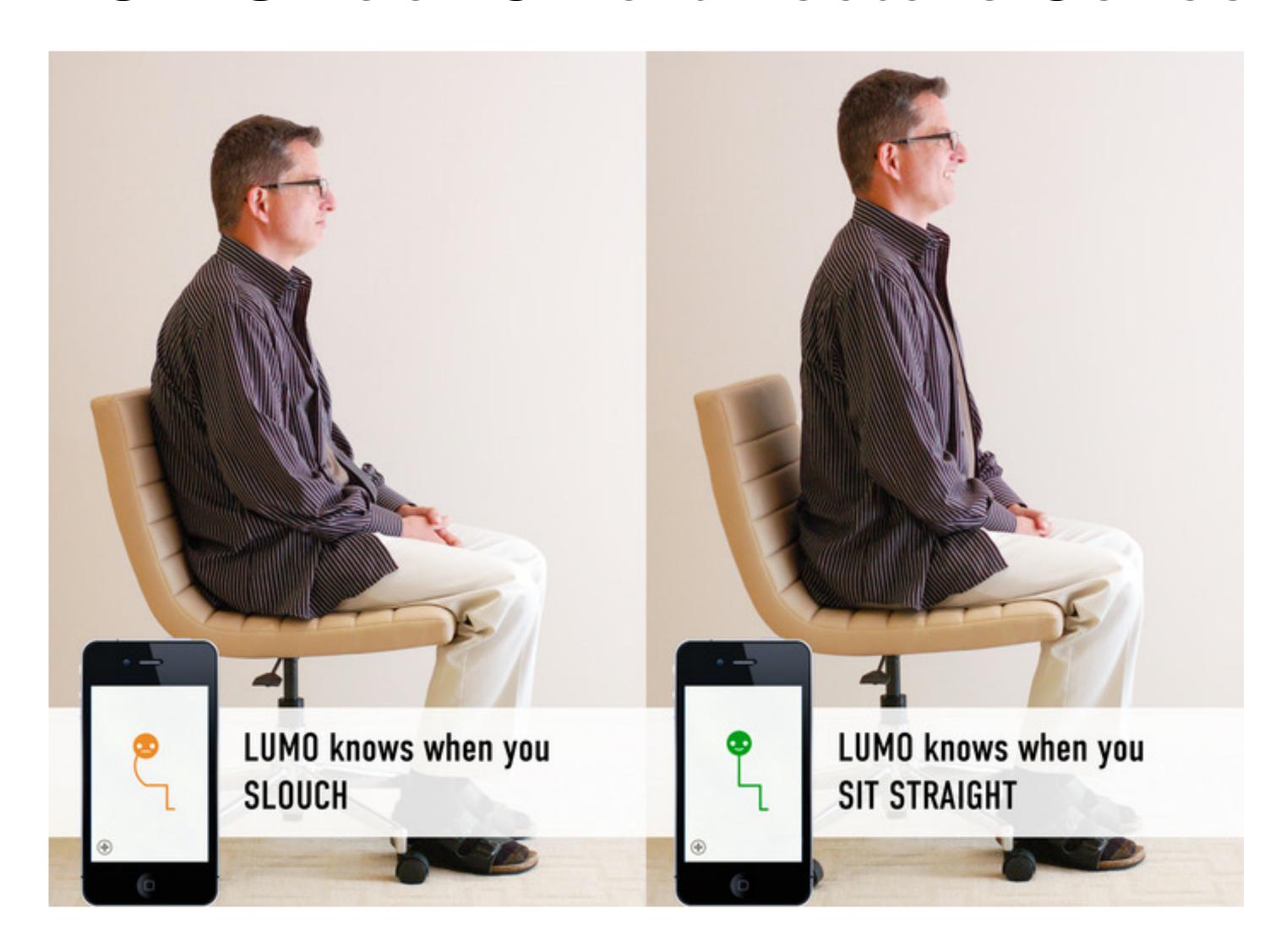
I. Technology shouldn't require all of our attention, just some of it, and only when necessary

### A Tea Kettle



# II. Technology should empower the periphery

### LUMOBack Smart Posture Sensor



Buzzes you when you exhibit poor posture.

# III. Technology should inform and encalm



### Weather Status Lighting

Hue Lightbulb connected to a weather report

Aaron Parecki @aaronpk 2014 IV. Technology should amplify the best of technology and the best of humanity.

- 1. Machines shouldn't act like humans
- 2. Humans shouldn't act like machines



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### Customer Service



### Sunspring Oscar Sharp and Ross Goodwin



When automation goes right

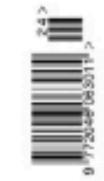
3Scan: 1500 times faster than humans

# The DRUM Magazine (Watson and Editors)

Al suggestion
Human curation









The algorithm eats itself
The snake eating its tail

- Gabriel Shalom



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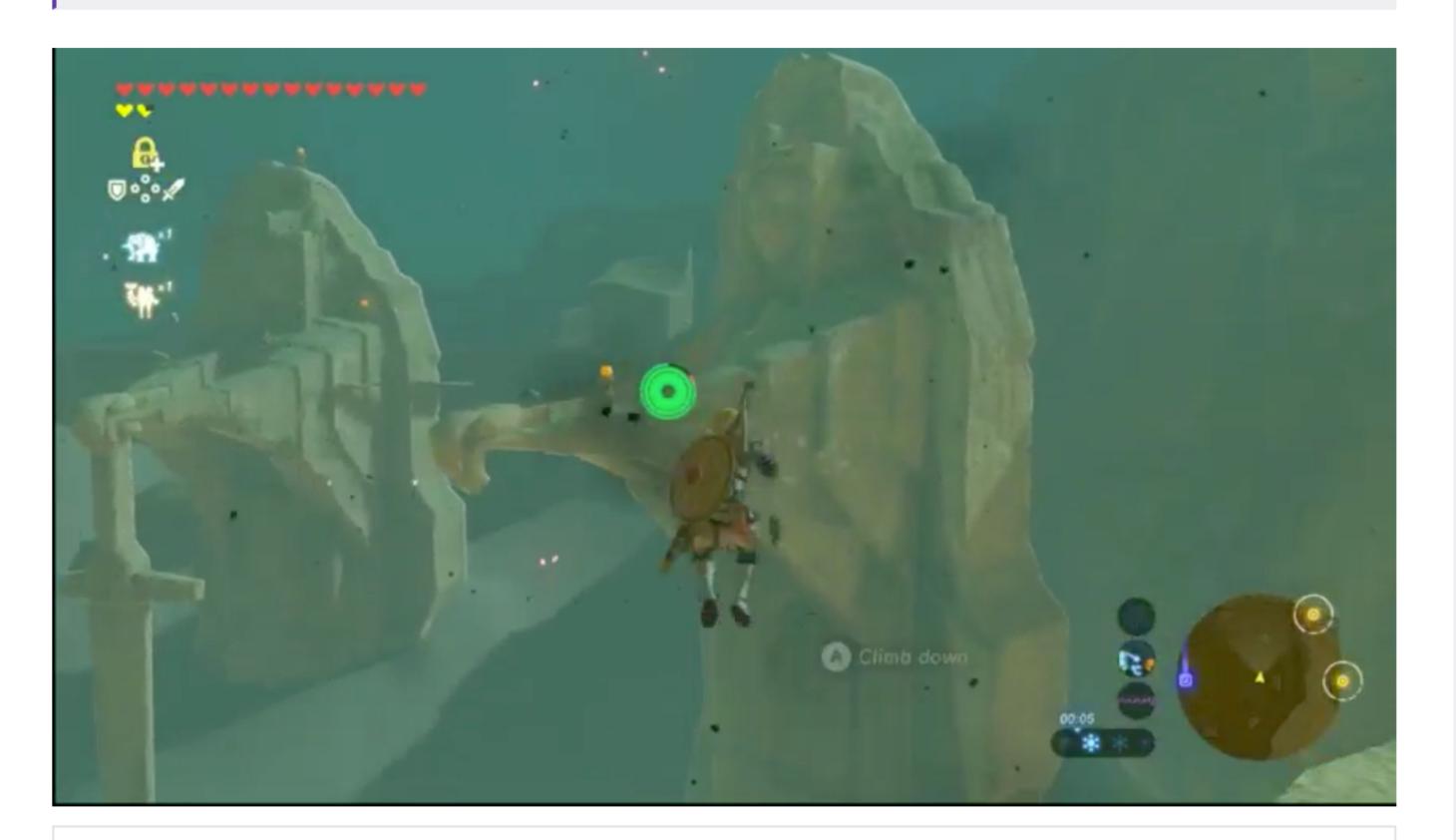
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Breath of the Wild (No Spoilers or help unless I ask for it) The Legend of Zelda: Breath of the Wild Team Huge Plays Welcome to the chat room!

anoldfolksong: blood moon is super weird

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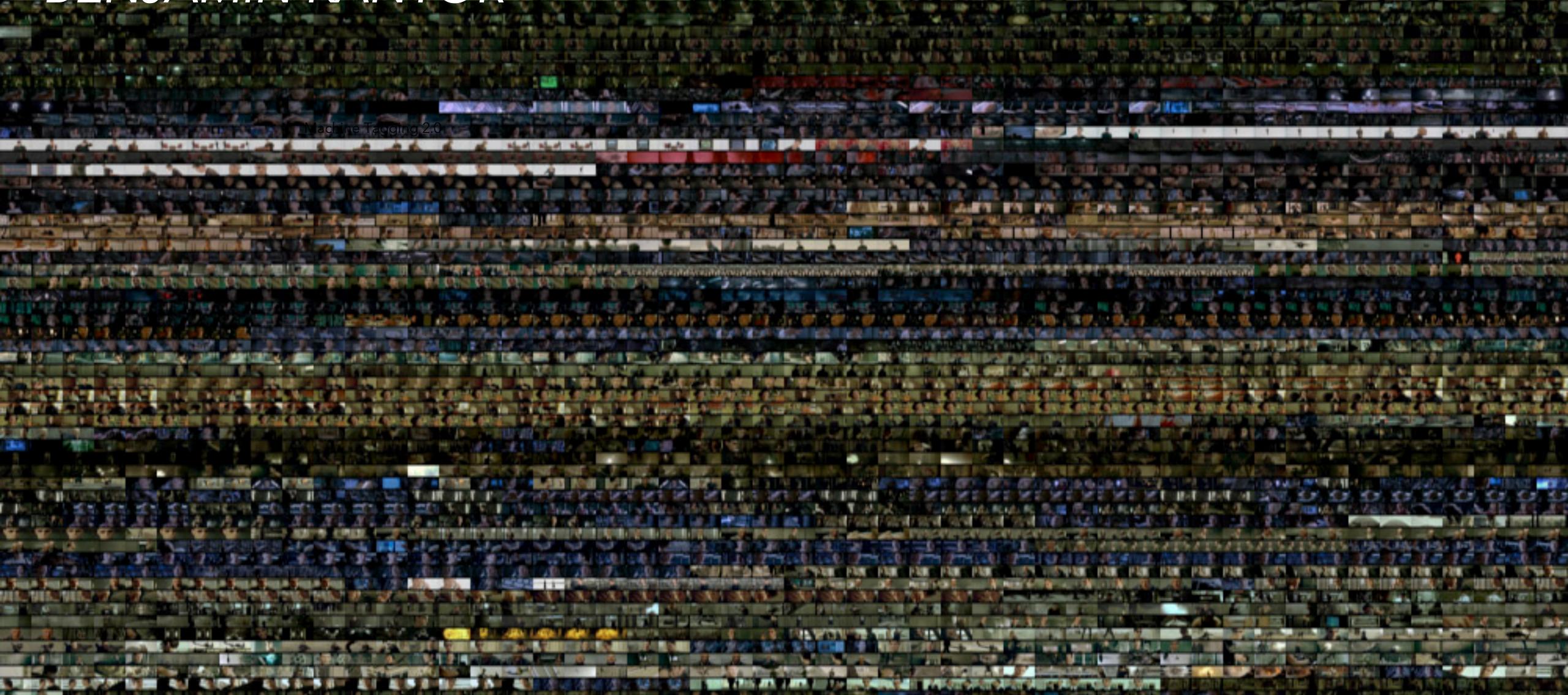
A fan-created, fan-run, non-profit, non-commercial archive for transformative fanworks, like fanfiction, fanart, fan videos, and podfic

more than 24170 fandoms | 1109000 users | 2896000 works

The Archive of Our Own is a project of the Organization for Transformative Works.

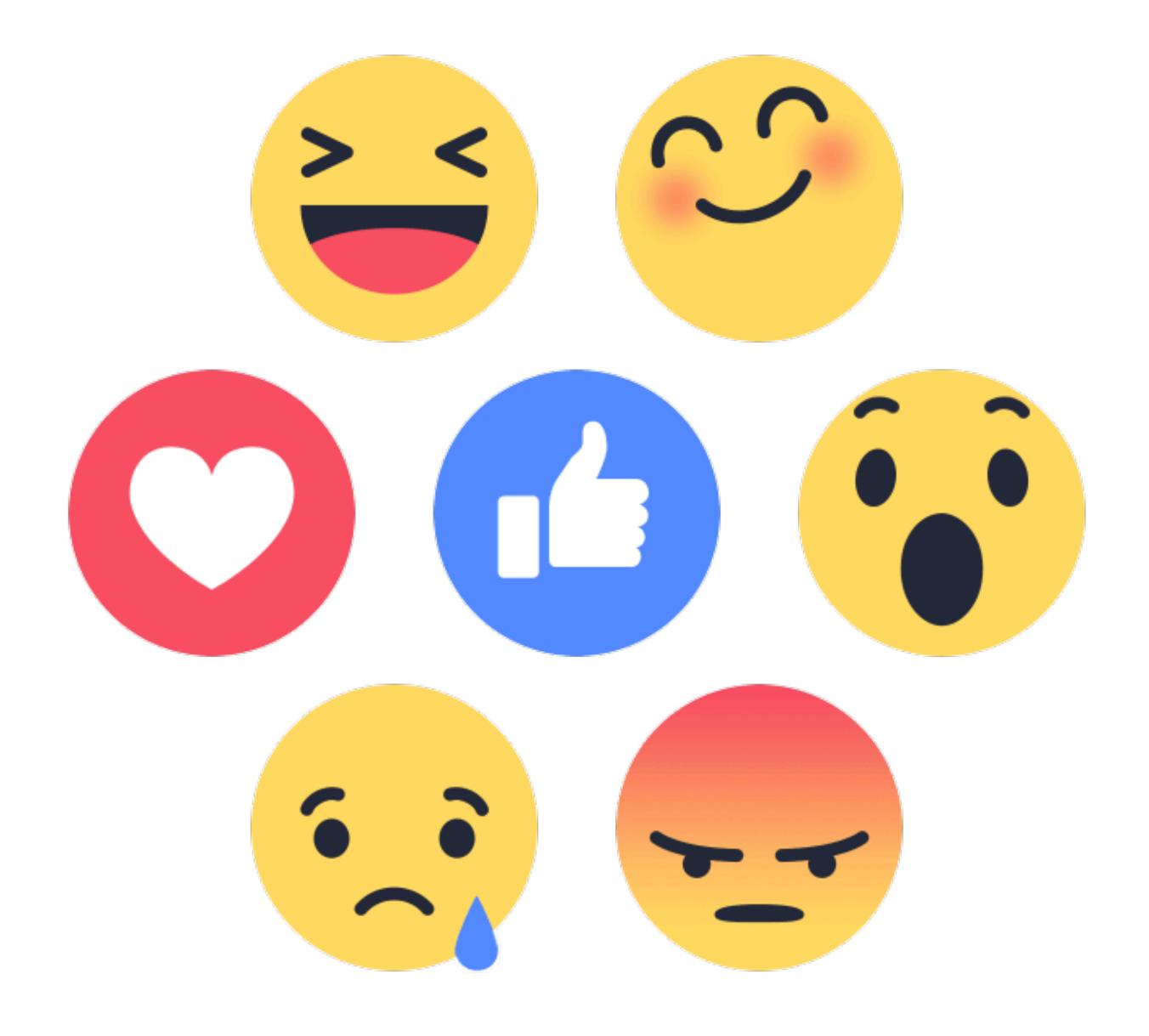
### Fan Communities

# The Matrix Slitscan BENJAMIN KANTOR

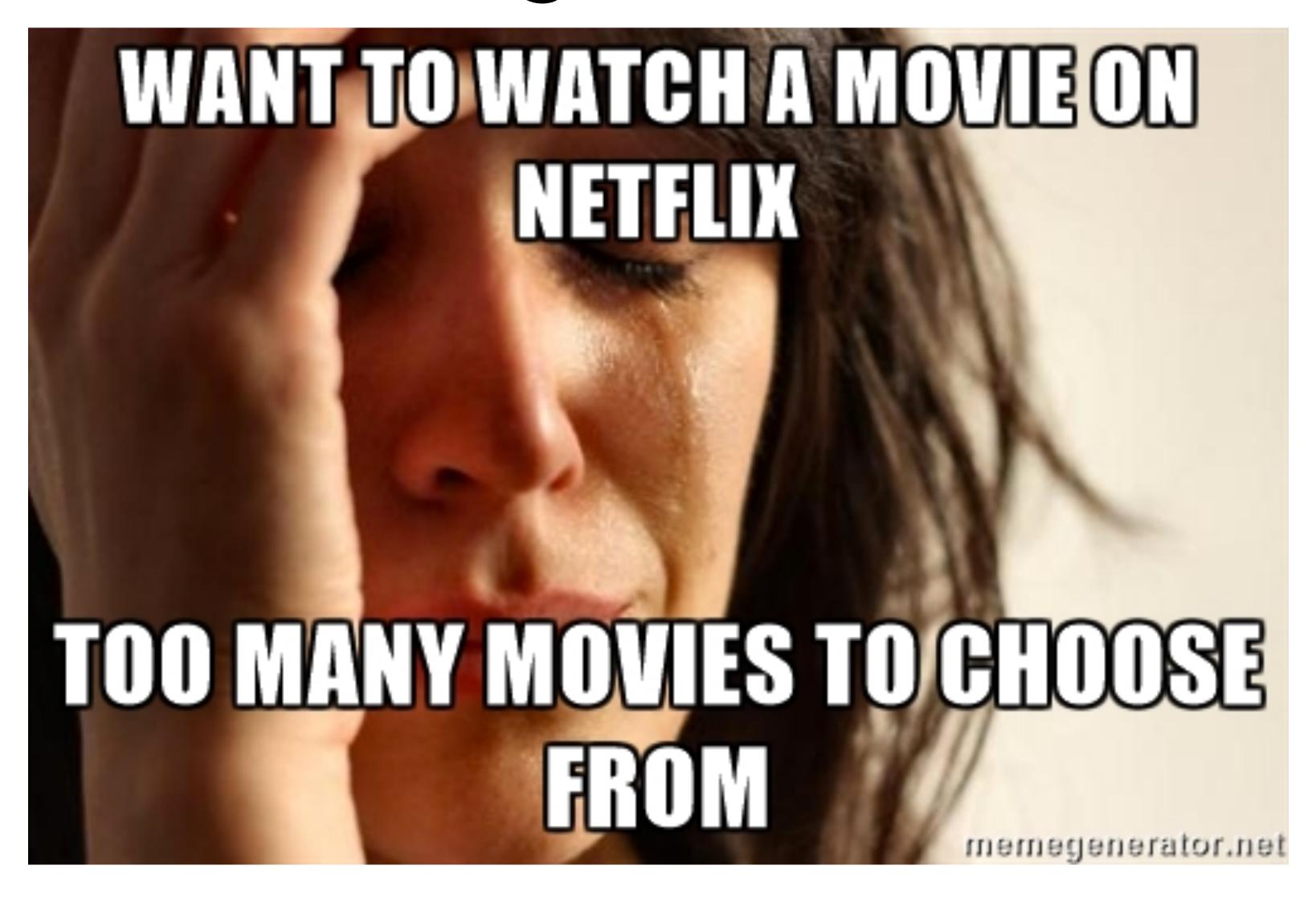


### Slumdog Millionaire

## Facebook reactions



### Decision-making



### Decisionmaking when hungry

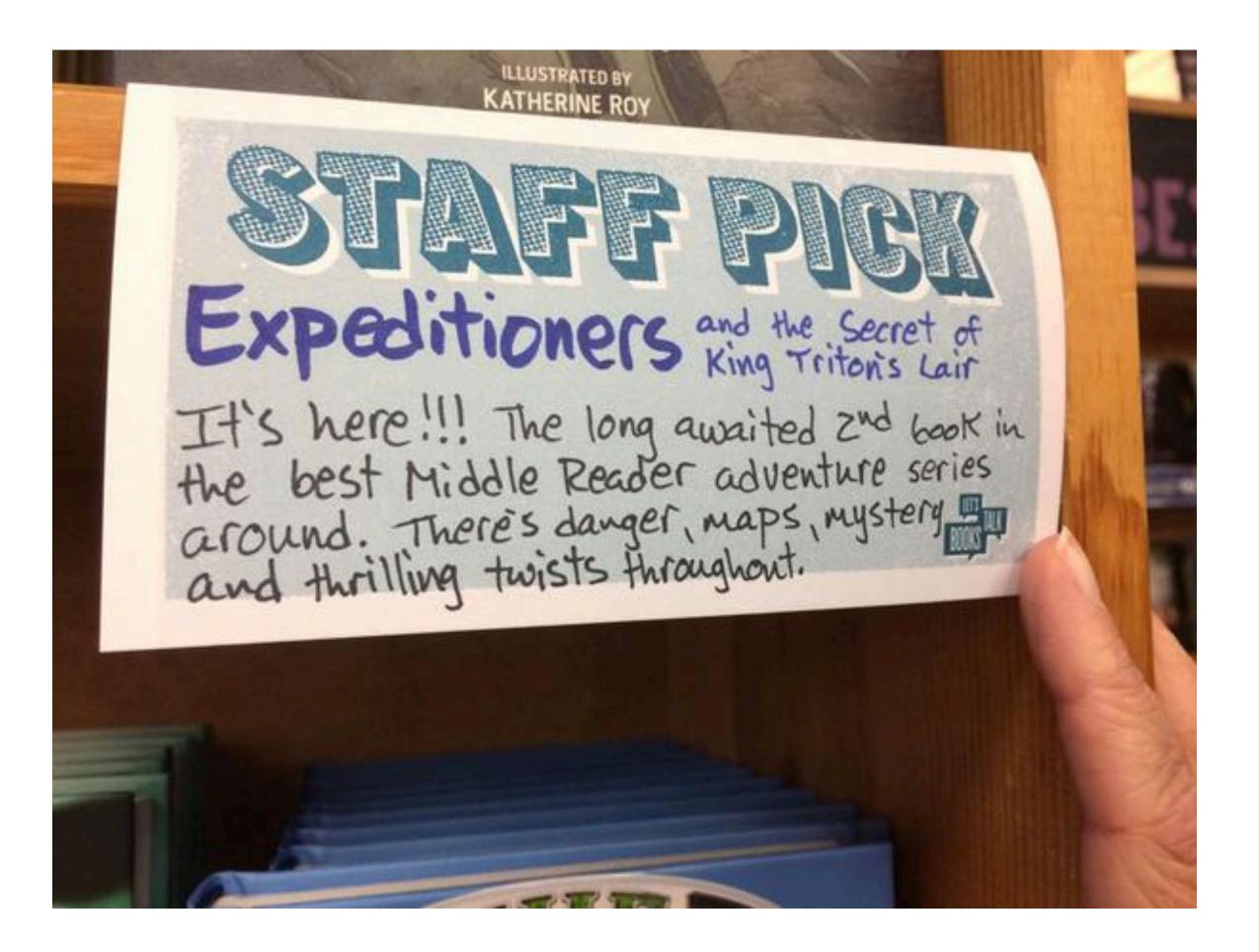
Non-hierarchical menu structures

CHINESE SOUPS			SHKAHARIYON KI PASAND	
	₹	7		₹
	Veg.	Non-Veg.	Chana Pindi	180.00
Sleek Soup	110.00	120.00	Yellow Dal	180.00
Crispy Rice Soup	110.00	120.00	Dal Makhani	180.00
Hot & Sour Soup	110.00	120.00	Dal Bukhara	210.00
Sweet Corn Soup	110.00	120.00	Rajma Masala	180.00
Wanton Soup	110.00	120.00	Seasonal Vegetable	160.00
Manchow Soup	110.00	120.00	Mix Veg Jalfrezi	160.00
Talumein Soup	110.00	120.00	Vegetable Kofta	185.00
Peking Soup	110.00	120.00	Angoori Kofta	220.00
Lemon Soup	110.00	120.00	Nargisi Kofta	235.00
Coriander Soup	110.00	120.00	Malai Kofta	24500
Clear Soup	110.00	120.00	Diwani Handi	220.00
Veg. Lemon Coriander Soup	110.00		Dum Aloo Kashmiri	190.00
			Dum Aloo Banarsi	190.00
CONTINENTAL SOUP			Paneer Butter Masala	235.00
		Paneer Bhujiya	250.00	
Cream of Tomato	110.00		Paneer Pasanda	260.00
Cream of Vegetable	110.00		Handi Paneer	235.00
Cream of Mushroom Soup	110.00		Palak Paneer	245.00
Cream of Chicken Soup		120.00	Shahi Paneer	250.00
			Paneer Tikka Masala	265.00
INDIAN			Matar Paneer	245.00
AATISH-A-TANDOOR VEG.		-	Karahi Paneer	245.00
			Paneer-do-Piyaza	245.00
Khushboo-e-Avadh		325.00	Matar Methi Malai	235.00
Paneer Tikka		250.00	Matar Mushroom	260.00
Paneer Achari Tikka		250.00	Mushroom Paneer	275.00
Paneer malai Tikka		260.00	Mushroom Masala	250.00
Paneer Shola Tikka		285.00	Karahi Mushroom	250.00
Sabz Shami Kebab		190.00	Mushroom-do-Piyaza	250.00
Sabz Hara Seekh		190.00	Palak Mushroom	250.00
Sabz Kathi Kebab		190.00	Aloo Matar	195.00
Kesar Paneer Methi ki Seekh		280.00	Gobhi Matar	195.00
Veg Seekh Kebab		195.00	Jeera Aloo	180.00
Mushroom Tikka		260.00	Navratan Korma	250.00
Vog Banaraci Kohah		195.00	Stuffed Tomatoes	200.00

### Slighly better, but not helpful

SOUP	SER OFF	RICE		OTHER DELIGHTS	
Tomato Soup	85/-	Jeera Rice	130/-	Amritsari Kulcha with Chole	180/
Sweet Corn Soup	95/-	Mutter Pulao	150/-	Paneer Kulcha with Dal & Raita	200/-
Hot & Sour Soup	90/-	Veg Biryani	180/-	Aloo Kulcha with Dal & Raita	160/-
Lung Fung Soup	95/-	Veg Pulao	160/-	Onion Kulcha with Dal & Raita	180/
Cream of Mushroom Soup	107/-		5000	Chole Chawal	130/-
Talumein Soup	95/-	Plain Rice	110/-	Rajma Chawal	130/
STARTERS	4.4.4	TANDOOR SE		Cheese Pulao with Raita Masala Pulao with Raita	190/
Tandoori Aloo	180/-	Roti	24/-	CHINESE	7 7
Veg. Seekh Kabab	190/-	Butter Roti	27/-	OTHINESE	
	12000			Hakka Noodles	160/
Hariyali Kabab	200/-	Missi Roti	33/-	Singaporian Noodles	170/
Mushroom Tikka	230/-	Laccha Parantha	40/-	Veg. Chowmein	140/
Paneer Tikka	260/-	Pudina Parantha	44/-	Veg. Manchurian Gravy	130/
Achari Tikka	260/-	Plain Naan	40/-	Veg. Manchurian Dry	140/
Tandoori Platter	310/-	Butter Naan	50/-	Chili Paneer Gravy	190/
A LA CARTE		Stuff Naan	57/-	Chili Paneer Dry	210/
			1000	Mix Vegetable Hot Garlic Sauce	205/
Dal Makhani	240/-	Aloo Kulcha	52/-	Veg. Chopsuey	160/
Rajma	140/-	Onion Kulcha	58/-	Fried Rice with Manchurian	210/
Yellow Dal Tadka	140/-	Paneer Kulcha	60/-	Veg. Fried Rice	130/
Chana Masala	145/-	Papad	40/-	Spring Roll	130/
Shahi Paneer	260/-	THALLO		Chili Crispy Potato	140/
Mutter Paneer	240/-	THALIS		Chili Mushroom	200/
Paneer Butter Masala	290/-	Char Vi Thali	100/	Chili Cauliflower	200/
Paneer Tikka Masala	265/-	Ghar Ki Thali	190/-	Crispy Vegetable Salt & Pepper	200/
Paneer Lababdar	260/-	(Yellow Dal, Mutter Paneer,		Chili Baby Corn	195/
Kadai Paneer	280/-	Pulao, Raita, Tandoori Roti 2 pcs,		Paneer 65	230/
Palak Paneer	240/-	Salad, Pickle)		Chili Garlic Fried Rice	220/
Malai Kofta	260/-			Golden Fried Baby Corn	220/
Palak Kofta	240/-	Mini Thali	210/-	Chinese Platter	260/
Veg. Jalfrezy	210/-		210/-	(Chili Paneer, Chowmein, Fried Rice, Manch	urian)
Mix Vegetable	180/-	(Dal Makhani, Shahi Paneer,		BEVERAGES	
Jeera Aloo	140/-	Mix Veg, Pulao, Raita,		The second secon	40
Mushroom Masala	260/-	Tandoori Roti 2 pcs,		Cold Drinks (Sprite, Coke, Fanta)	40/
Mutter Mushroom	280/-	Salad, Pickle, Papad)		Diet Coke	40/
Methi Mutter Malai	240/-			Fresh Lime Water (Sweet/Mix)	40/
Gobhi Masala	170/-	Deluve Theli	240/-	Fresh Lime Soda (Sweet/Mix)	50/
Aloo Sabji	130/-	Deluxe Thali	240/-	Butter Milk	40
Paneer Mumtaz	300/-	(Dal Makhani, Shahi Paneer,		Milk Badam	50/
Paneer Pasanda	290/-	Mix Veg, Pulao, Raita, Naan 1pc,		Lassi Kesar	60
Dum Aloo	240/-	Laccha Parantha 1pc, Salad,		Tea	50
Raita	100/-	Pickle, Papad, Sweet)		Cappuccino	70
Green Salad	85/-	. John of Laboration		Mineral Water	30

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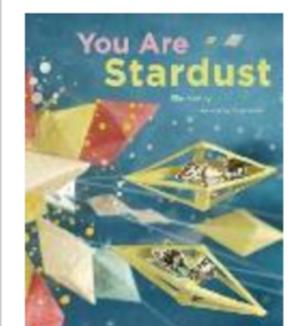
Dr. Seuss: Buy 2 Get 1 Free

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Staff Top Fives of 2016

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Powell's Picks of the Month

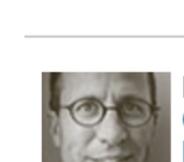


#### You Are Stardust

Elin Kelsey, Soyeon Kim

A gorgeously creative book about the scientific nature of the world and of ourselves, and how the two are beautifully intertwined. With writing that reads like poetry, the story is science-based but is presented magically, breathlessly. It will leave the reader filled with astonishment at not only the incredible facts about our bodies, but the unbelievable accompanying art as well.

Recommended by Heather A.



Michael Finkel: We Can't Get Away From It All (0 comment)

Now, perhaps more than ever before in my



Fashion Plates: 150 Years of Style

April Calahan

Ooh la la! Fashion Plates is a walk through our fashionable past.

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Hi, Amber Case  $\vee$ 



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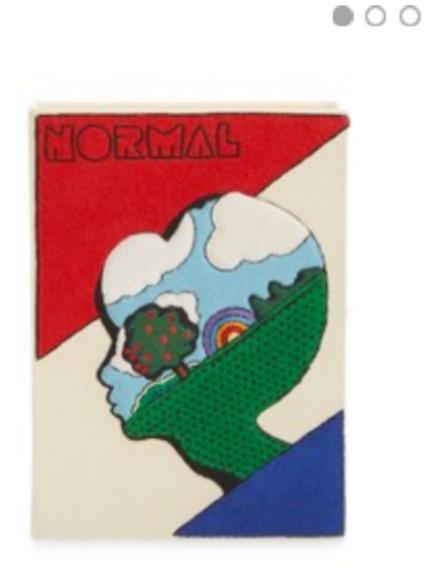
M Missoni Plissé Knit Cardigan

\$795.00

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New!
M Missoni Metallic Intarsia
Cardigan
\$895.00



Olympia Le-Tan Normal Book Clutch (Limited Edition) \$1,771.00



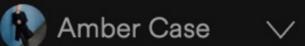
Theory Murta Wilmore Suede Miniskirt \$695.00



New!

M Missoni Geometric
Jacquard A-Line Dress
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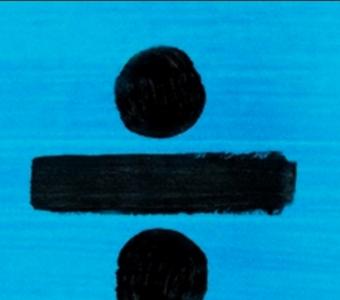
New Playlist

Demon

#### Stream the many sides of Ed Sheeran.

The new album, out now.

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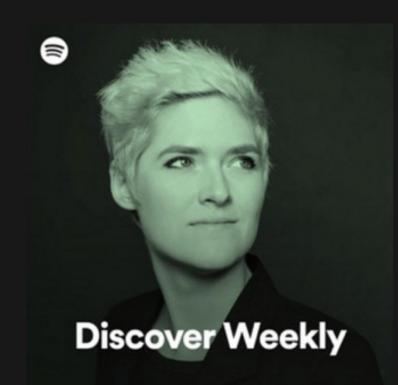
**GENRES & MOODS** 

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#### Great playlists all night long.



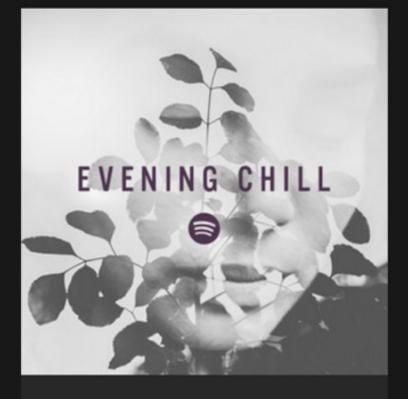
#### Discover Weekly

Your weekly mixtape of fresh music. Enjoy new discoveries and deep cuts chosen just for...



#### The Newness

Take a listen to the newest, freshest RnB tunes! Cover photo: Khalid



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Elevate your evening and unwind with the lush sounds of these chill tracks...



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Back In the Daze  $\,\,+\,\,$ 



74











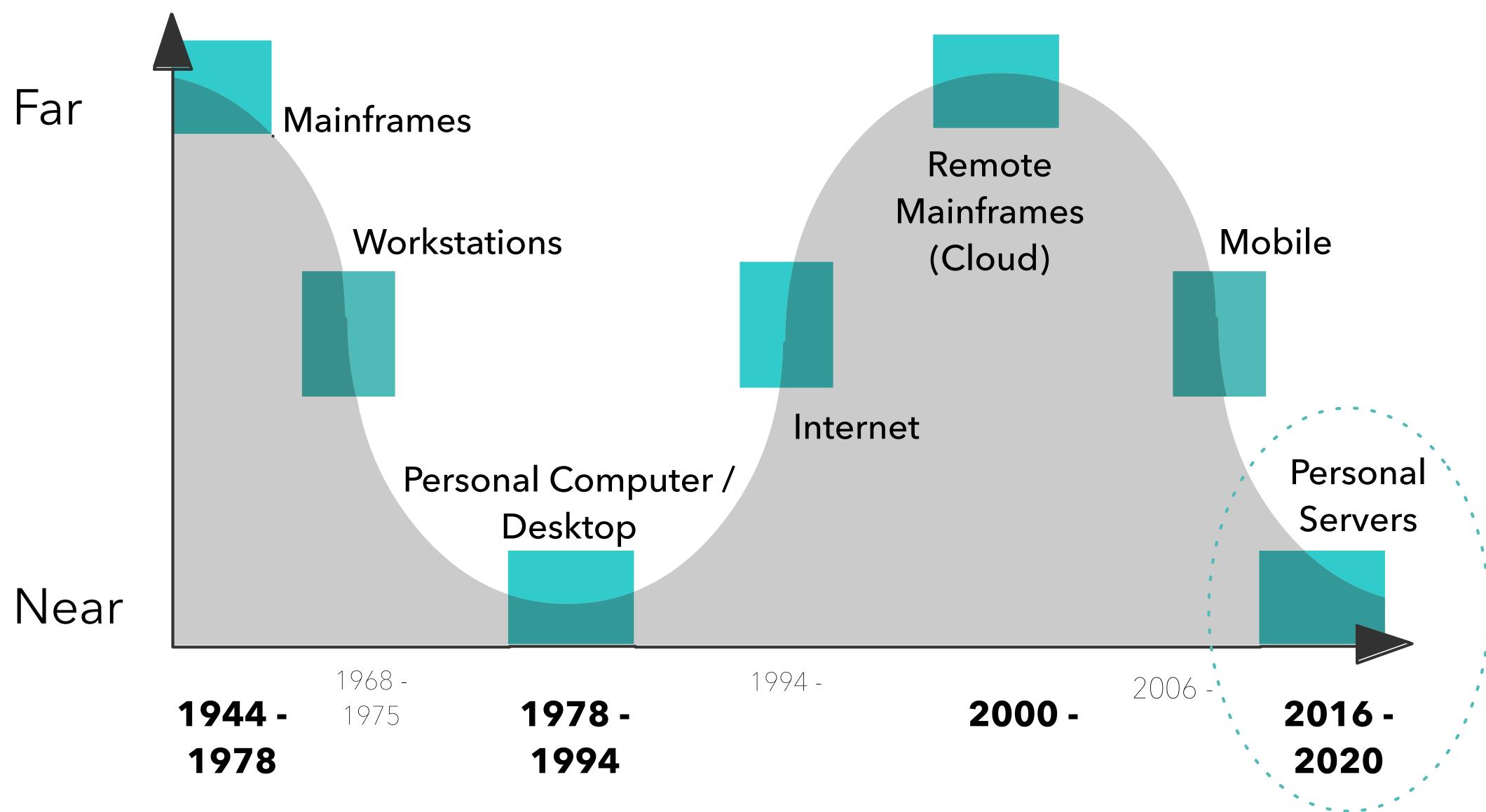


4:53

6:12

# VIII. Technology should make use of the near and the far

#### Evolution of computers over time



## Process as much as possible on the device itself.







Good design allows people to accomplish their goals in the least amount of moves

Calm Technology allows people to accomplish their goals with the *least* amount of mental cost

A person's primary task should not be computing, but being human.

The scarce resource in the 21<sup>st</sup> Century will not be *technology*. It will be *attention*. - Mark Weiser

### 8 Principles at Calmtech.com

CalmTechnology.com

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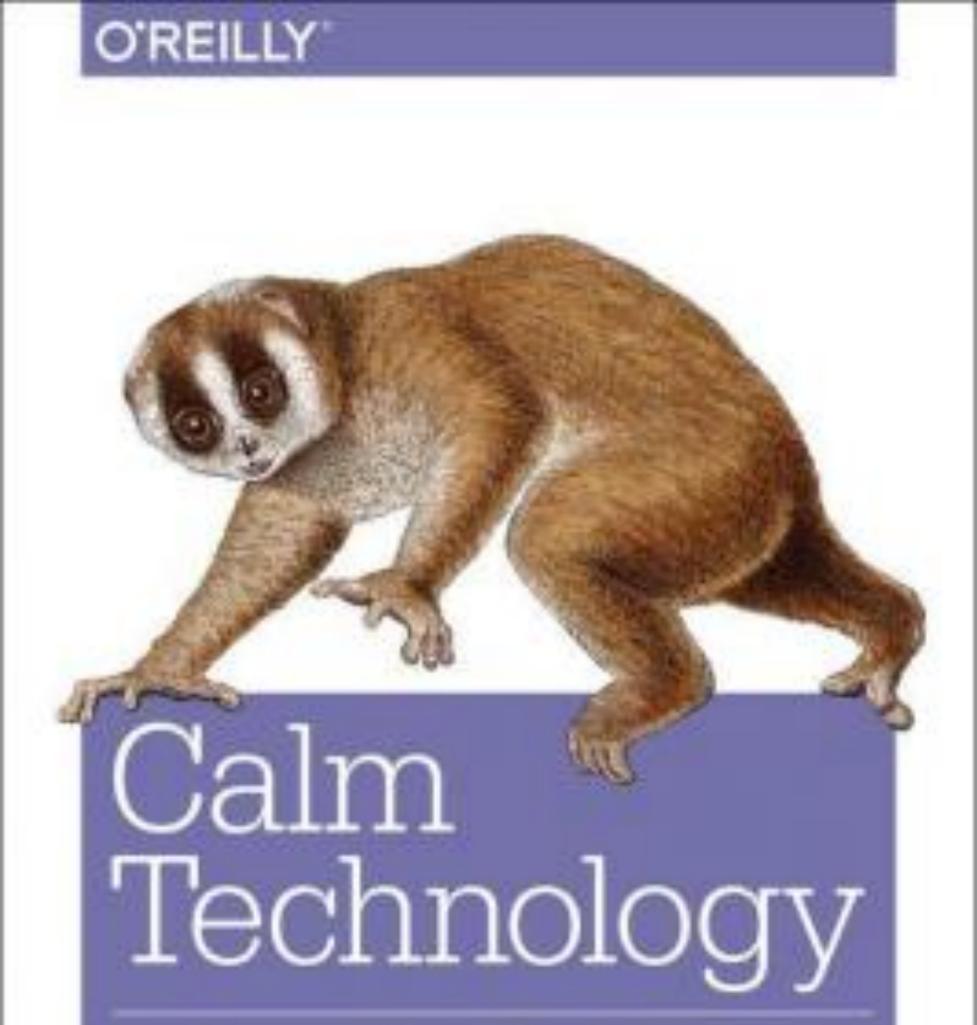
The world around is made up of information that competes for our attention. How much is necessary? How much is not?

We cannot interact with our everyday life in the same way we interact with a desktop computer.

**Technology shouldn't require all of our attention,** just some of it, and only when necessary. Take a teapot, for example. It tells us when it is ready, and is off or quiet the rest of the time. If technology works well, we can ignore it most of the time.

"The most profound technologies are those that **disappear**. They weave themselves into the fabric of everyday life until they are **indistinguishable from it.**"

-Marc Weiser (1952-1999) Xerox Parc, 1988



PRINCIPLES AND PATTERNS FOR NON-INTRUSIVE DESIGN

# Calm Technology Book

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## Thank you very much!

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