

# Taxonomy for App Makers: Movie Monsters & Medical Insurance

UX London

30 May 2014

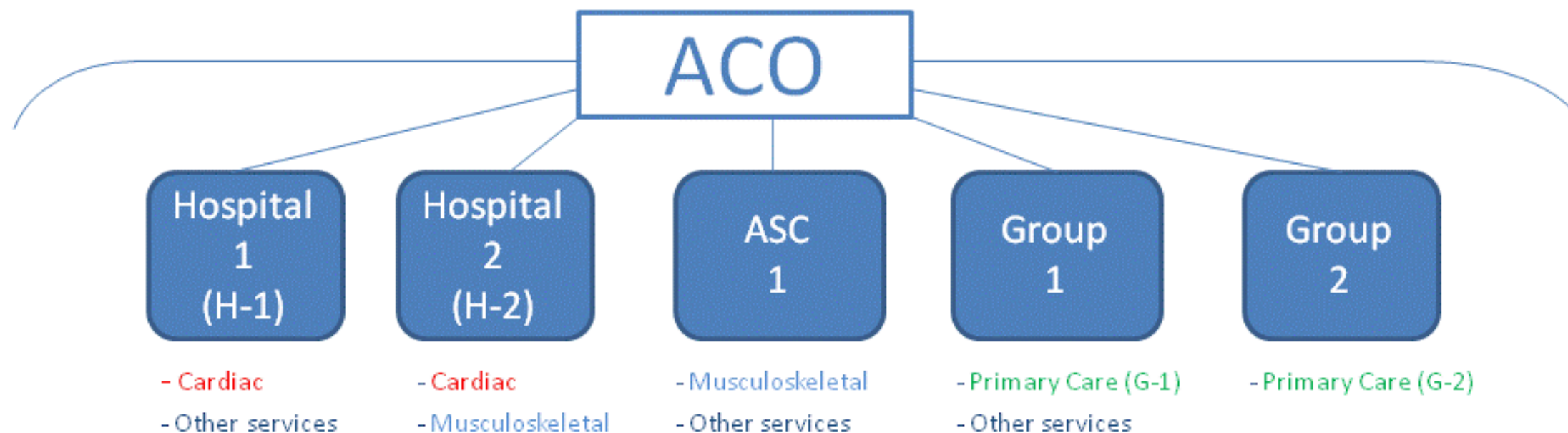
Presented by [Andy Fitzgerald, PhD](#)

**Deloitte.**  
**Digital**



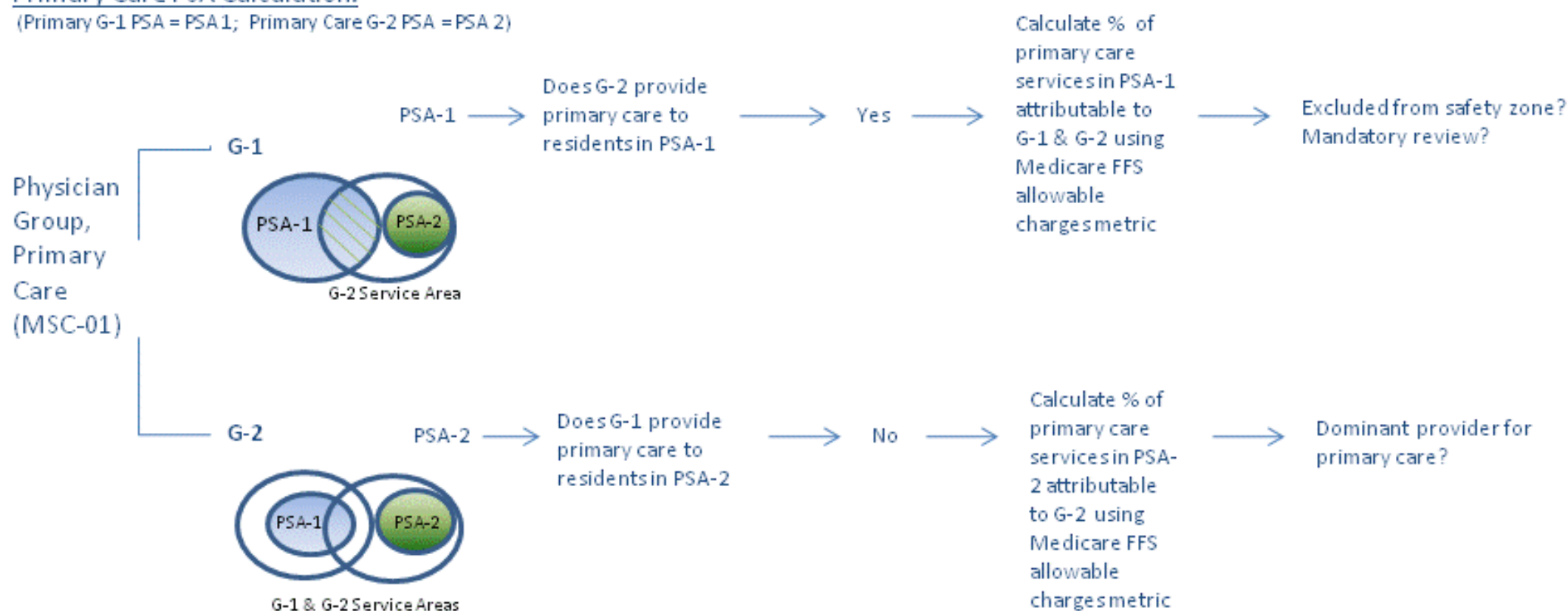






#### Primary Care PSA Calculation:

(Primary G-1 PSA = PSA 1; Primary Care G-2 PSA = PSA 2)













# Overview

## Part I: Taxonomy

-  Categories & meaning making
-  Movie monster categorization
-  Taxonomy & navigation
-  HealthMed: building flexible taxonomies

# Overview

## Part II: App Making



From IA to UI



Mapping navigation



Beyond textuality



Interface futures



# Overview

## Resources

- <http://andyfitzgerald.org/apptaxonomy>
- #apptaxonomy
- @andybywire

Categories & meaning-making.

“There are no natural concepts or categories  
which are simply reflected in language.  
Language plays a crucial role in constructing  
reality.”

- Daniel Chandler. *Semiotics*



“Creative organization of information creates new information”

- Richard Saul Wurman. *Hats*

**taxos-**

“arrangement”

+

**-nomia**

“method”

## Rhetoric

The means by which we inform, persuade, or motivate particular audiences in specific situations.







## Phenetics

Classification of organisms based on overall similarity

## Cladistics

Classification of organisms based on derivative ancestral characteristics







“The objectivist criteria for being in the same category is having common properties. But there is no objectivist criterion for *which properties* are to count.”

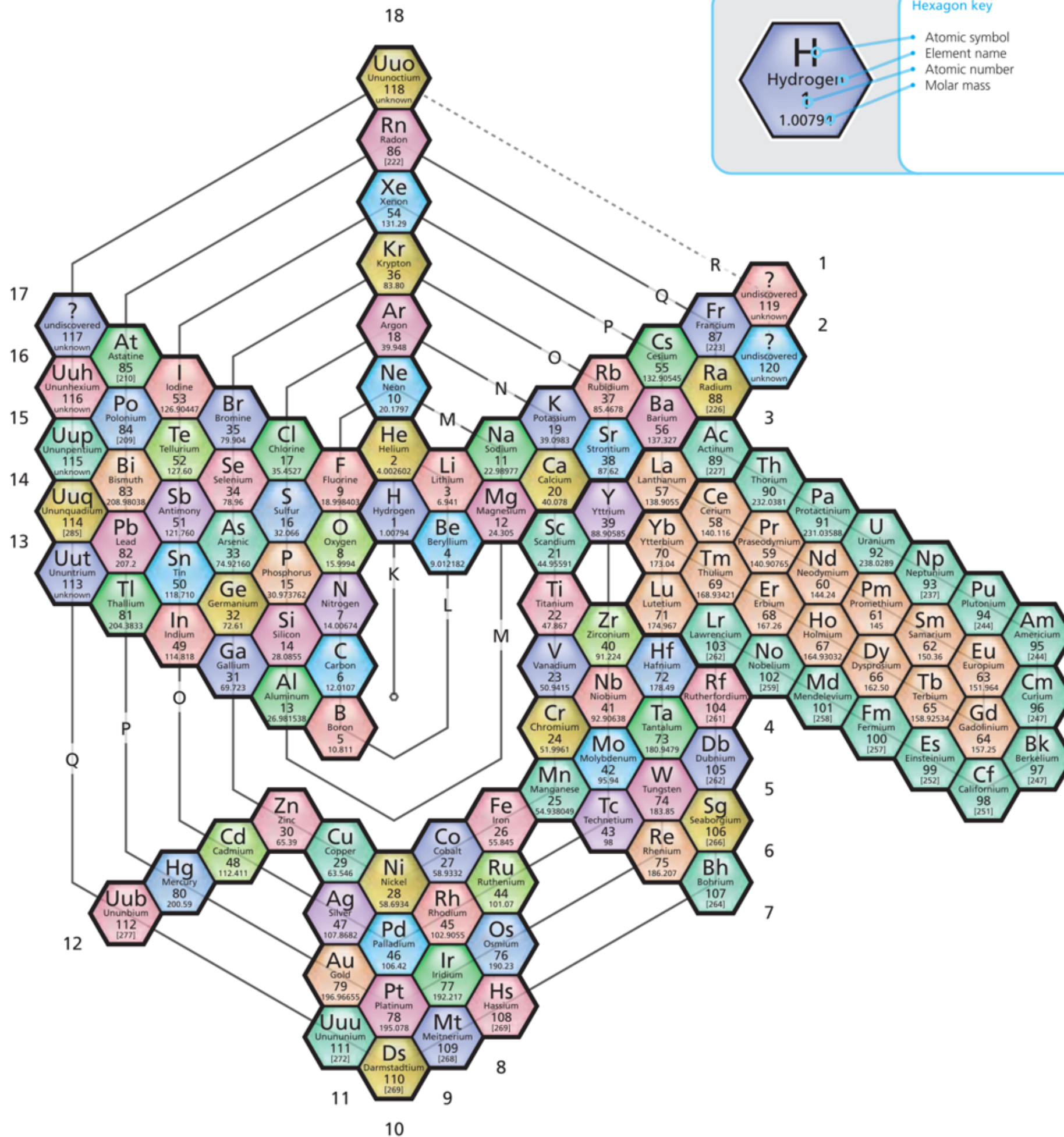
- George Lakoff. *Women, Fire, and Dangerous Things*

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lithium 3 Li 6.941	beryllium 4 Be 9.0122											boron 5 B 10.811	carbon 6 C 12.011	nitrogen 7 N 14.007	oxygen 8 O 15.999	fluorine 9 F 18.998	neon 10 Ne 20.180	
sodium 11 Na 22.990	magnesium 12 Mg 24.305											aluminium 13 Al 26.982	silicon 14 Si 28.086	phosphorus 15 P 30.974	sulfur 16 S 32.065	chlorine 17 Cl 35.453	argon 18 Ar 39.948	
potassium 19 K 39.098	calcium 20 Ca 40.078	scandium 21 Sc 44.956	titanium 22 Ti 47.867	vanadium 23 V 50.942	chromium 24 Cr 51.996	manganese 25 Mn 54.938	iron 26 Fe 55.845	cobalt 27 Co 58.933	nickel 28 Ni 58.693	copper 29 Cu 63.546	zinc 30 Zn 65.39	gallium 31 Ga 69.723	germanium 32 Ge 72.61	arsenic 33 As 74.922	selenium 34 Se 78.96	bromine 35 Br 79.904	krypton 36 Kr 83.80	
rubidium 37 Rb 85.468	strontium 38 Sr 87.62	yttrium 39 Y 88.906	zirconium 40 Zr 91.224	niobium 41 Nb 92.906	molybdenum 42 Mo 95.94	technetium 43 Tc [98]	ruthenium 44 Ru 101.07	rhodium 45 Rh 102.91	palladium 46 Pd 106.42	silver 47 Ag 107.87	cadmium 48 Cd 112.41	indium 49 In 114.82	tin 50 Sn 118.71	antimony 51 Sb 121.76	tellurium 52 Te 127.60	iodine 53 I 126.90	xenon 54 Xe 131.29	
caesium 55 Cs 132.91	barium 56 Ba 137.33	57-70 ✱	lutetium 71 Lu 174.97	hafnium 72 Hf 178.49	tantalum 73 Ta 180.95	tungsten 74 W 183.84	rhenium 75 Re 186.21	osmium 76 Os 190.23	iridium 77 Ir 192.22	platinum 78 Pt 195.08	gold 79 Au 196.97	mercury 80 Hg 200.59	thallium 81 Tl 204.38	lead 82 Pb 207.2	bismuth 83 Bi 208.98	polonium 84 Po [209]	astatine 85 At [210]	radon 86 Rn [222]
francium 87 Fr [223]	radium 88 Ra [226]	89-102 ✱ ✱	lawrencium 103 Lr [262]	rutherfordium 104 Rf [261]	dubnium 105 Db [262]	seaborgium 106 Sg [266]	bohrium 107 Bh [264]	hassium 108 Hs [269]	meitnerium 109 Mt [268]	ununnillium 110 Uun [271]	unununium 111 Uuu [272]	ununbium 112 Uub [277]		ununquadium 114 Uuq [289]				

\* Lanthanide series

\*\* Actinide series

lanthanum 57 <b>La</b> 138.91	cerium 58 <b>Ce</b> 140.12	praseodymium 59 <b>Pr</b> 140.91	neodymium 60 <b>Nd</b> 144.24	promethium 61 <b>Pm</b> [145]	samarium 62 <b>Sm</b> 150.36	europium 63 <b>Eu</b> 151.96	gadolinium 64 <b>Gd</b> 157.25	terbium 65 <b>Tb</b> 158.93	dysprosium 66 <b>Dy</b> 162.50	holmium 67 <b>Ho</b> 164.93	erbium 68 <b>Er</b> 167.26	thulium 69 <b>Tm</b> 168.93	ytterbium 70 <b>Yb</b> 173.04
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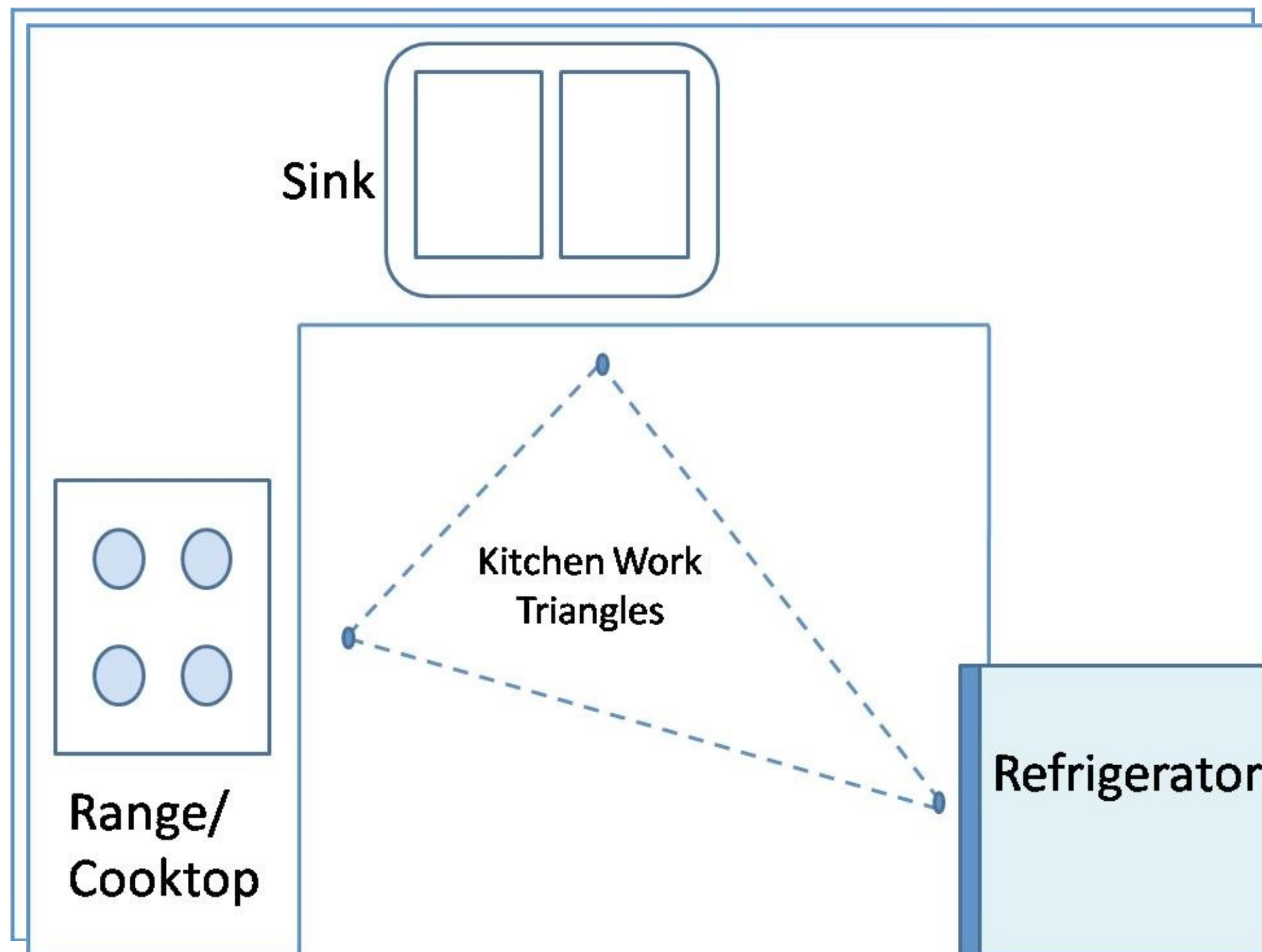


Architecture is rhetoric for spaces.





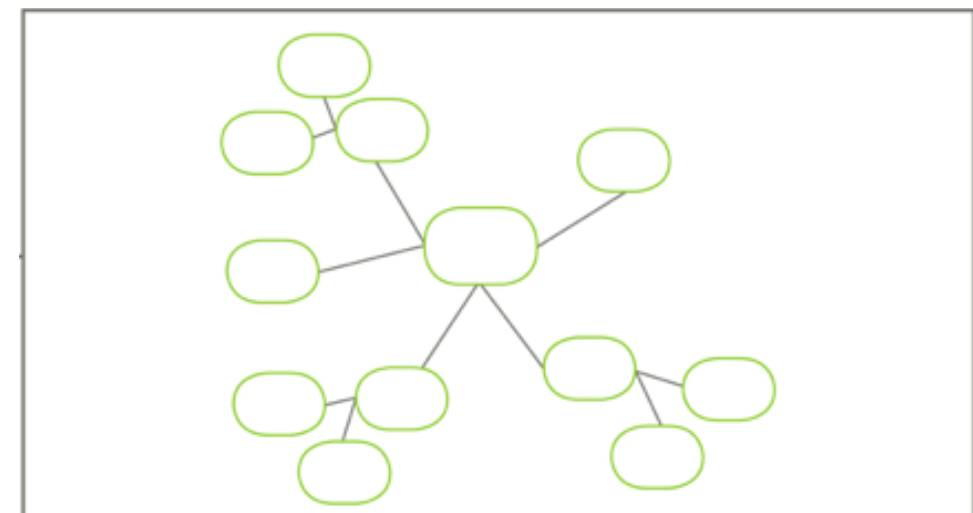
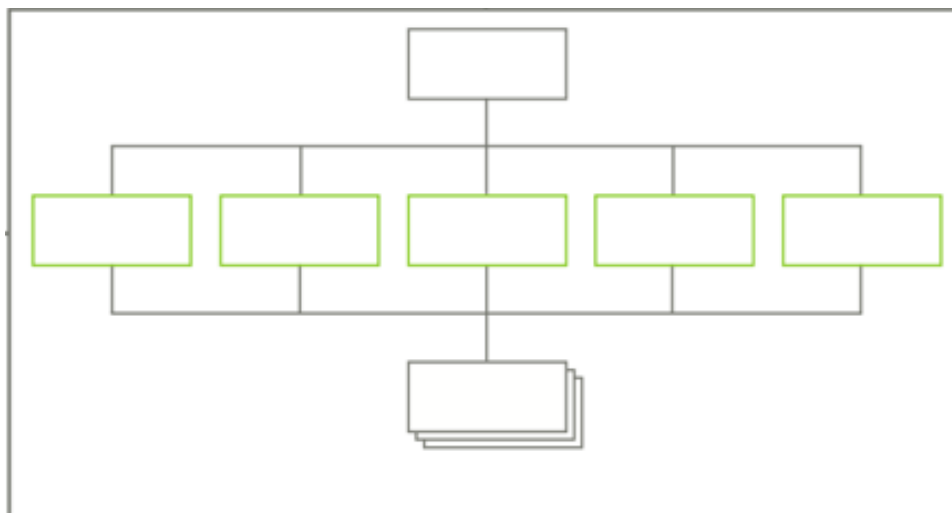
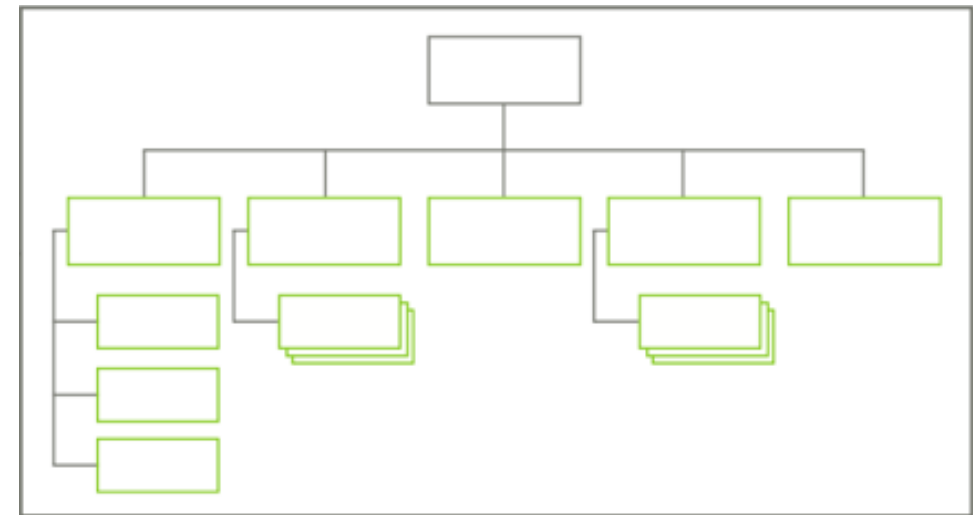
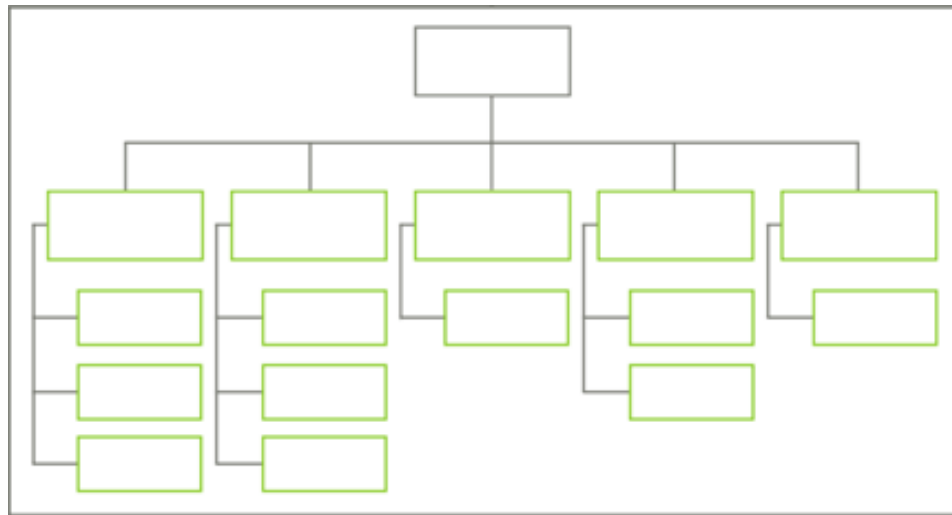




# **Taxonomy**

A method of arrangement conceived to create a particular kind of understanding.













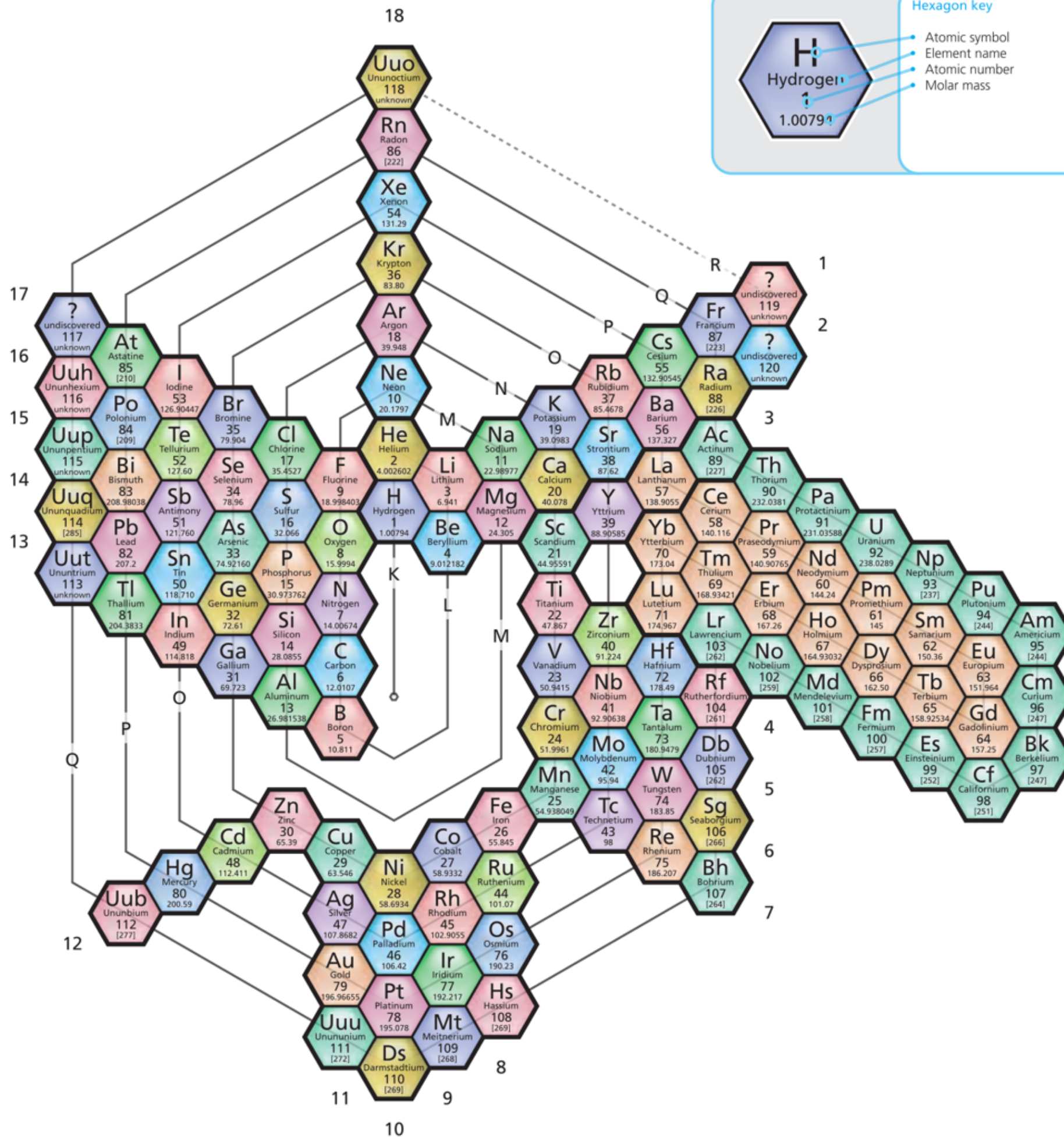
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Movie monsters & categories.

# Movie Monsters & Categories

- Monster cards
- Brief brief
- Post-Its
- Drafting dots



# Movie Monsters & Categories

15 minutes

- Identify a design concept based on your audience
- Based on your brief, group your monsters
  - in a way that makes sense to your audience
  - in the context of the argument specified in the brief
- Create category labels (blank cards)
- Note relevant attributes (Post-It notes)

# Movie Monsters & Categories

10 minutes

- What is your design concept?
- What fell right into place?
- Where did you have to make compromises?
- Which are the outliers?



Taxonomy & navigation.

# THE NATURE OF INFORMATION ARCHITECTURE

*ontology*

particular meaning

*taxonomy*

arrangement of the parts

*choreography*

rules for interaction among the parts



# Ontology

- “Particular meaning”
- “What we mean when we say what we say”
- *The argument*: how we encourage users to think about the content or functionality we are offering

# Taxonomy

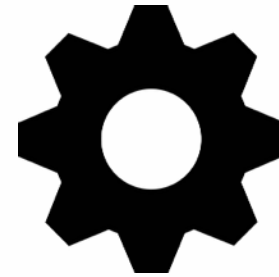
- “Arrangement of the parts”
- “Arrangement of meaning in and across contexts”
- How the pieces of the argument fit together – a method of arrangement conceived to create a particular kind of understanding.



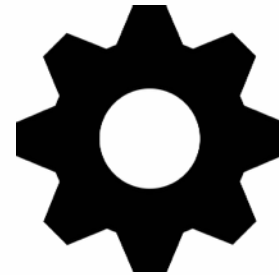
# Choreography

- “Rules for interaction among the parts”
- “The appropriate unfolding”
- Must respond to context in order to be effective

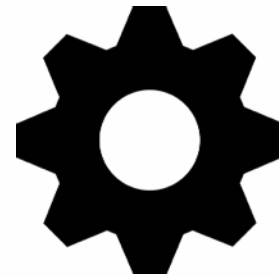
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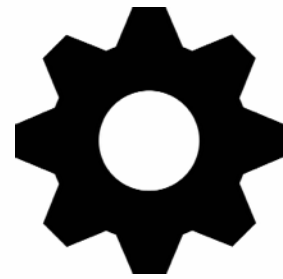
**TAXONOMY**



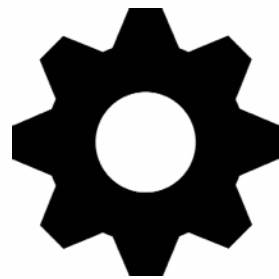
**CHOREOGRAPHY**



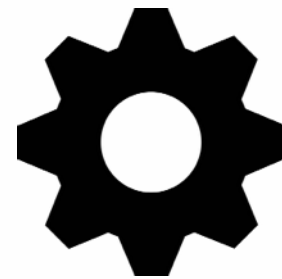




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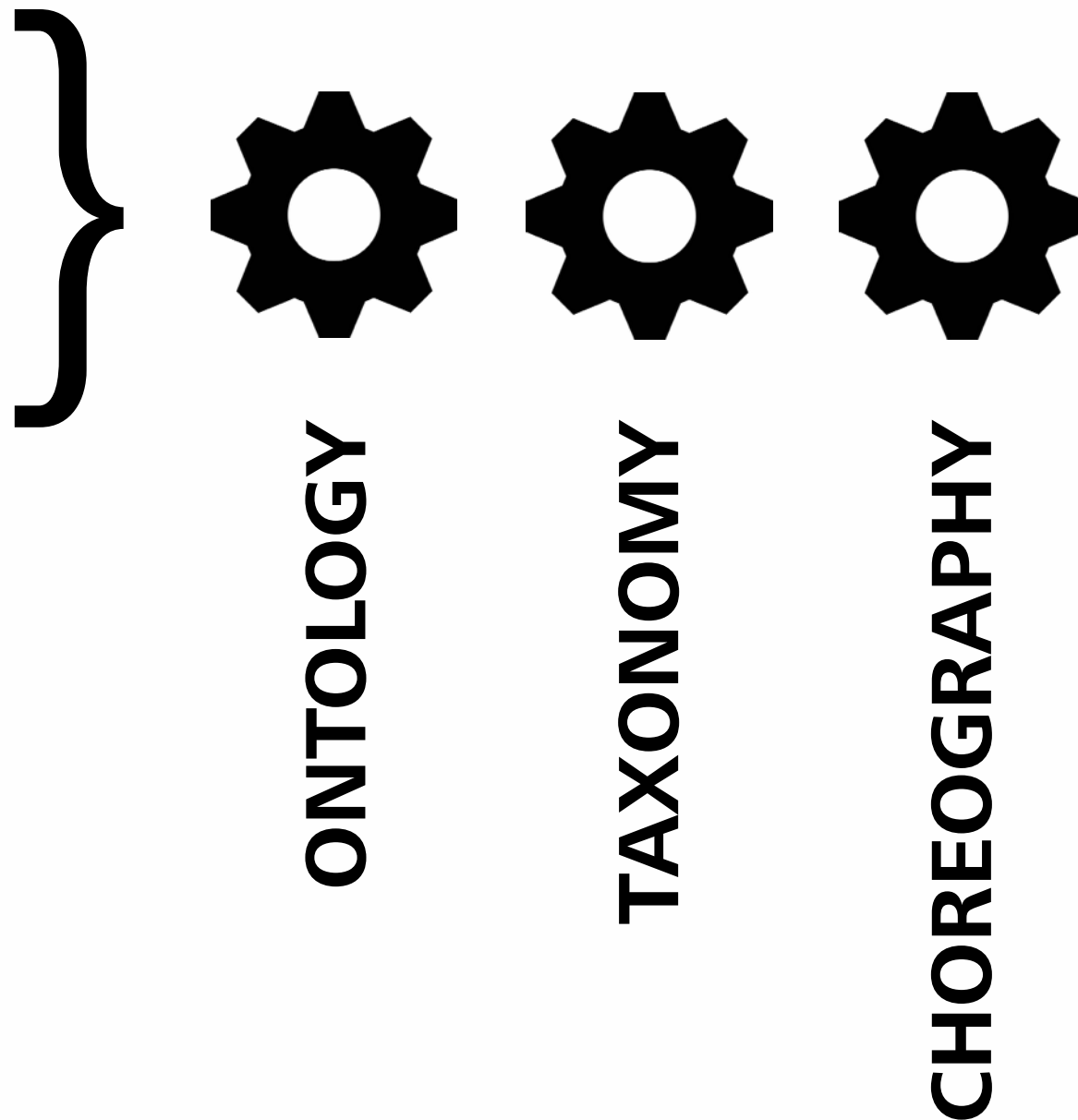


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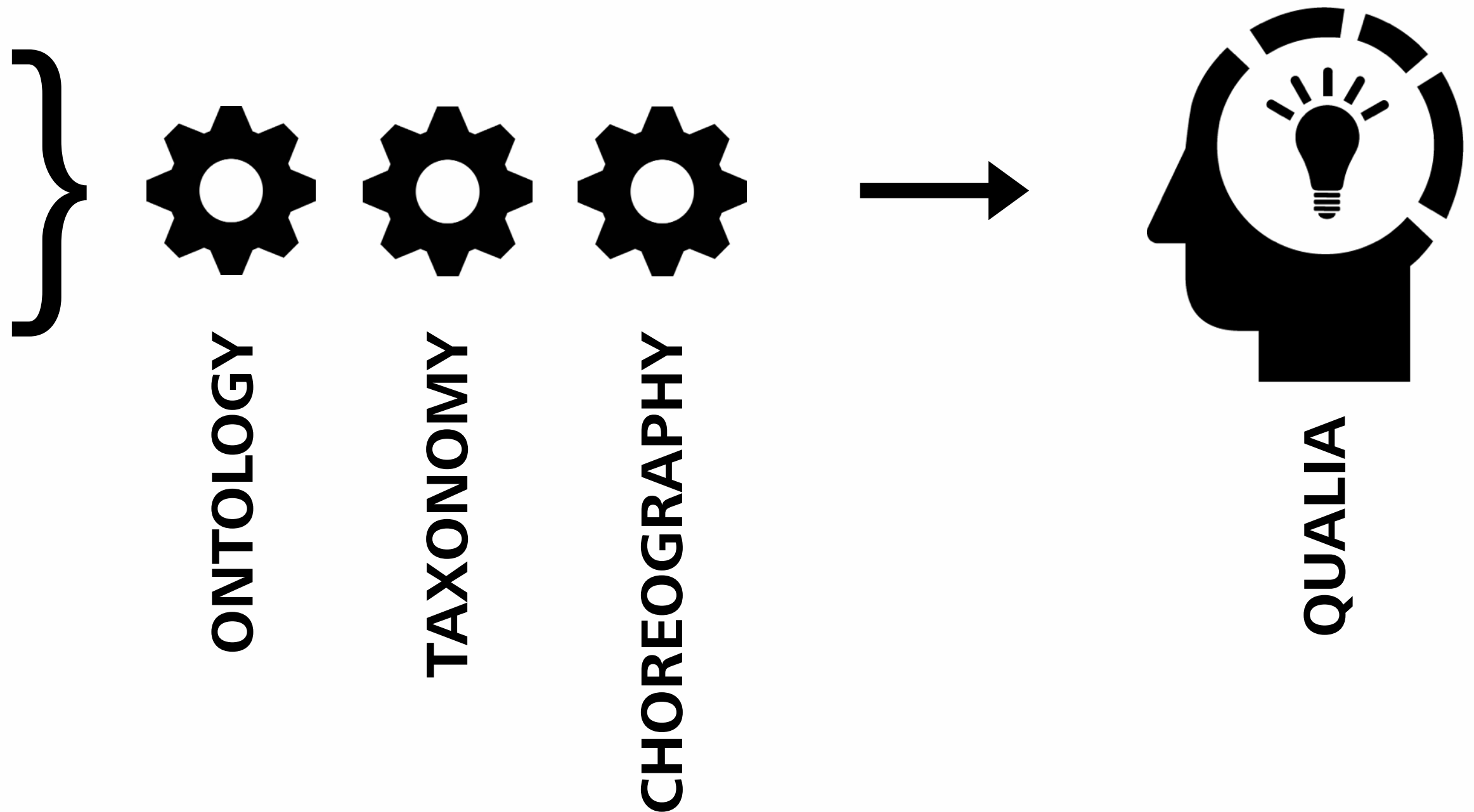


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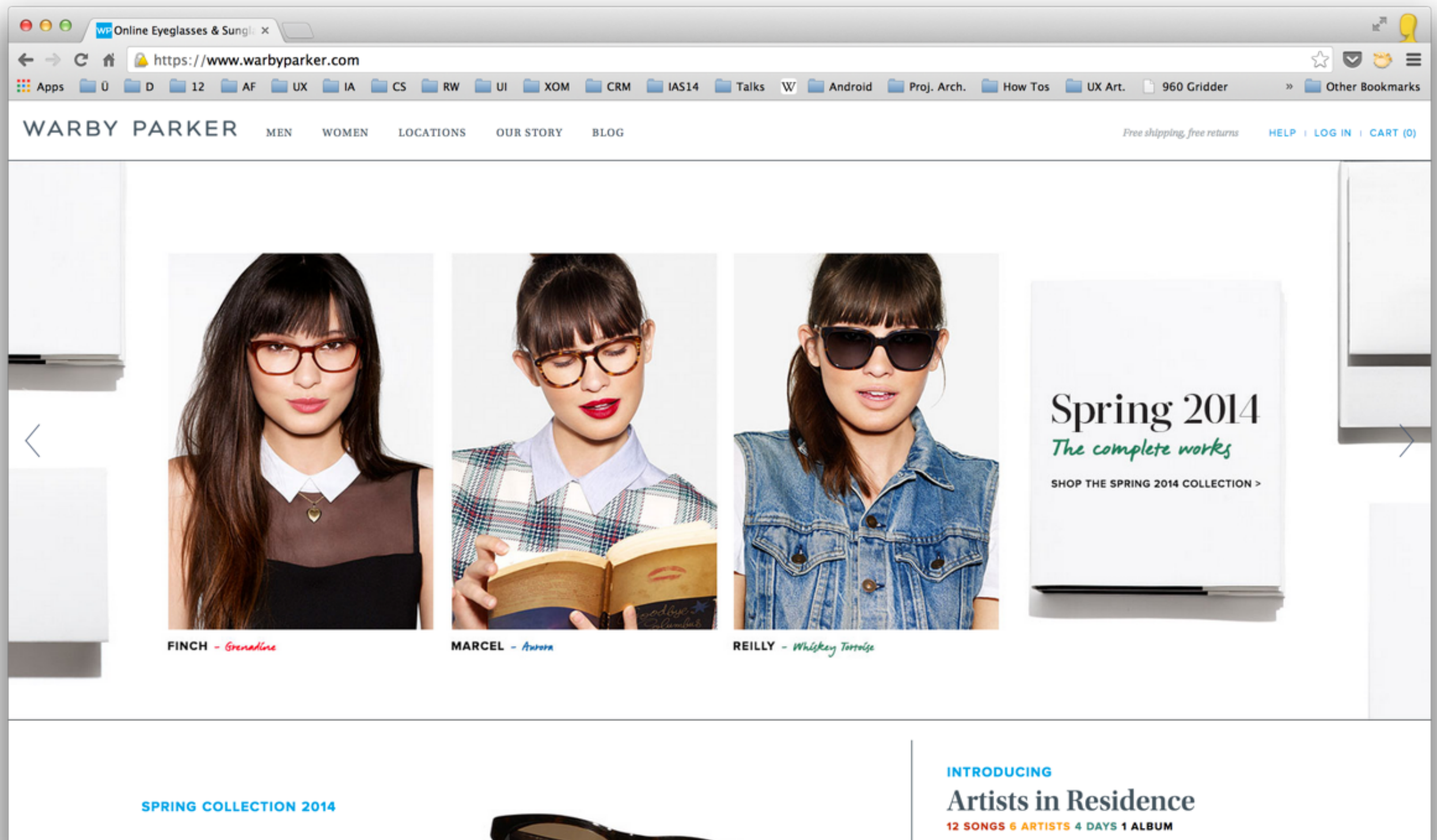
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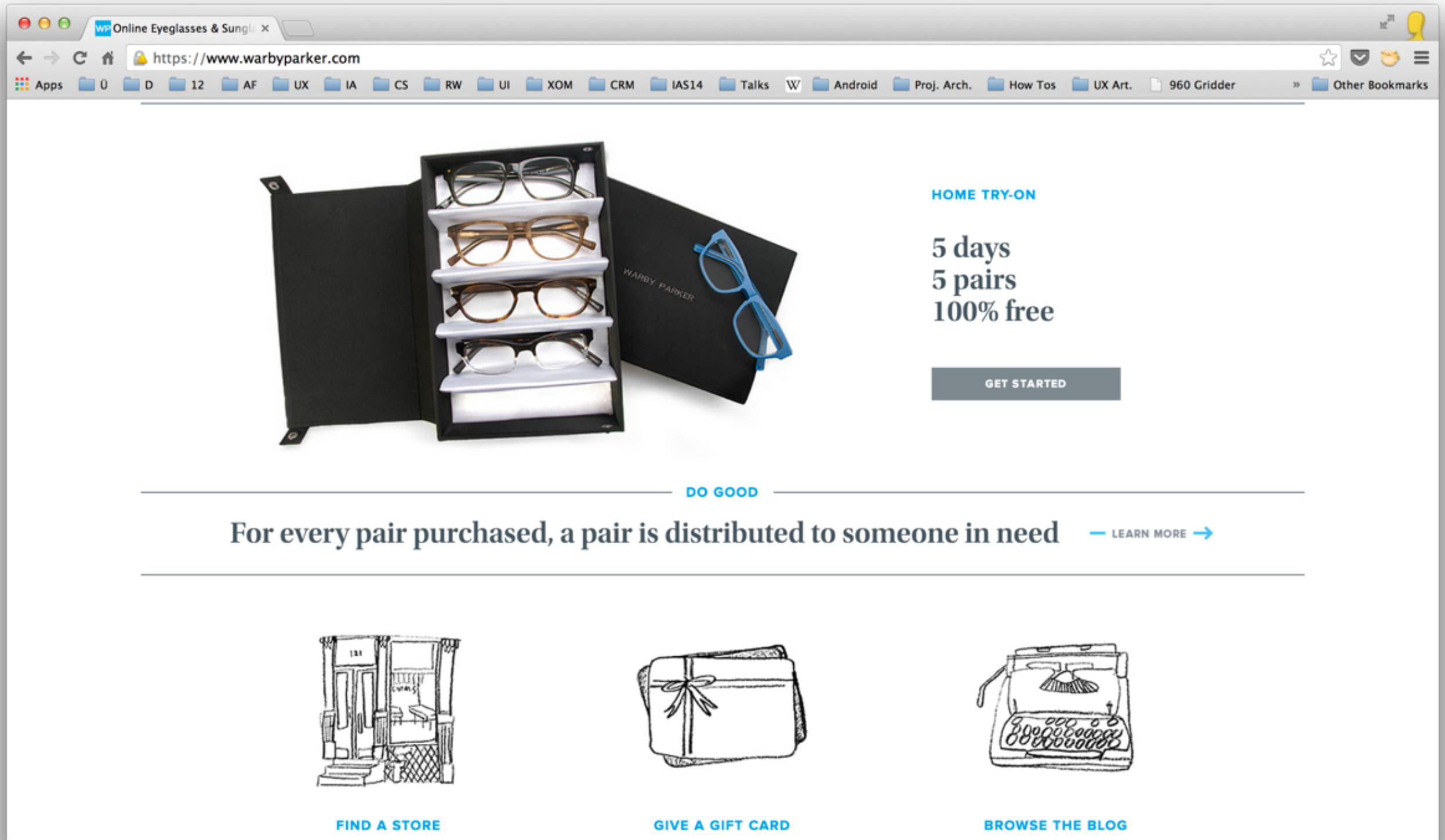


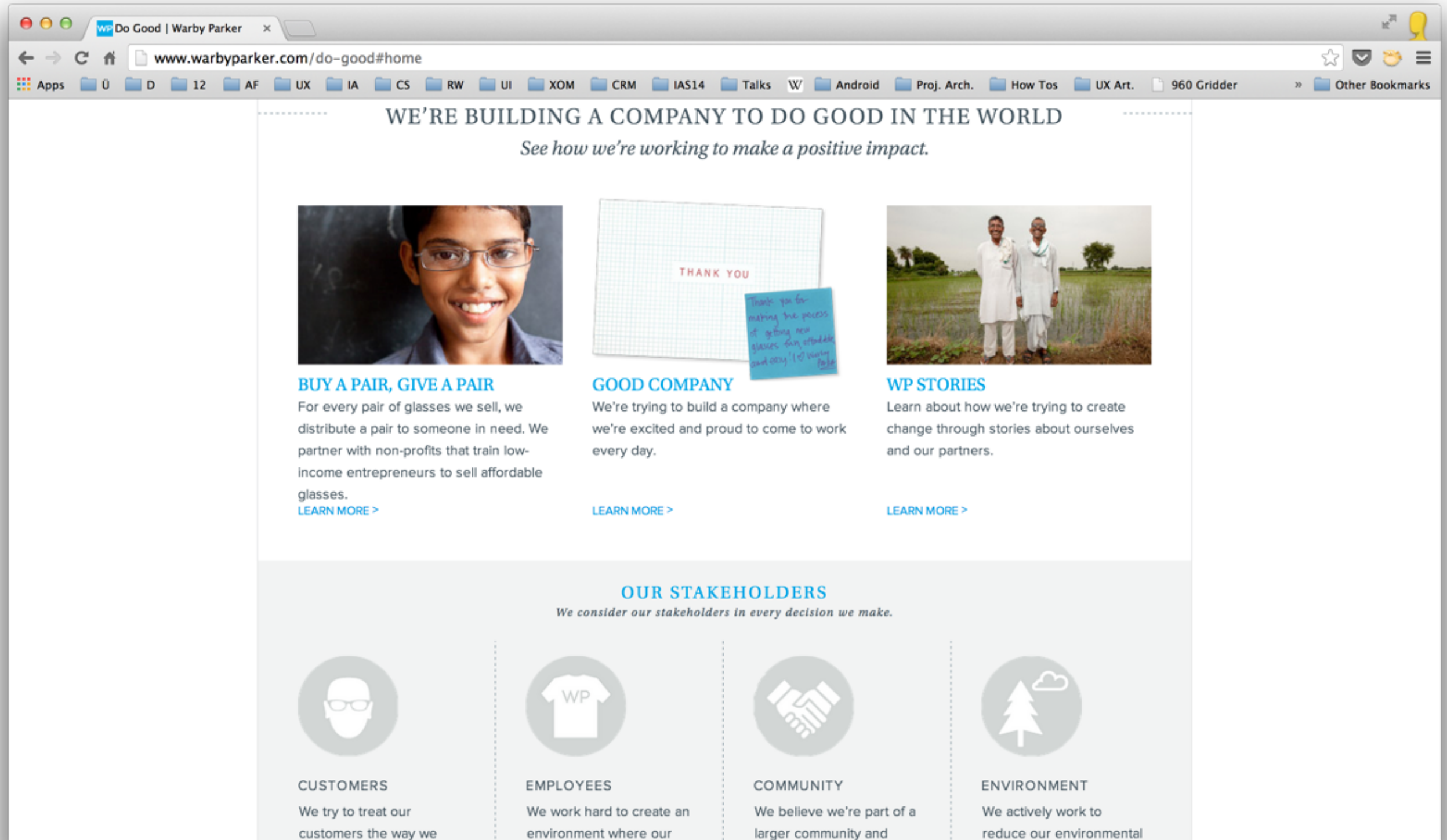
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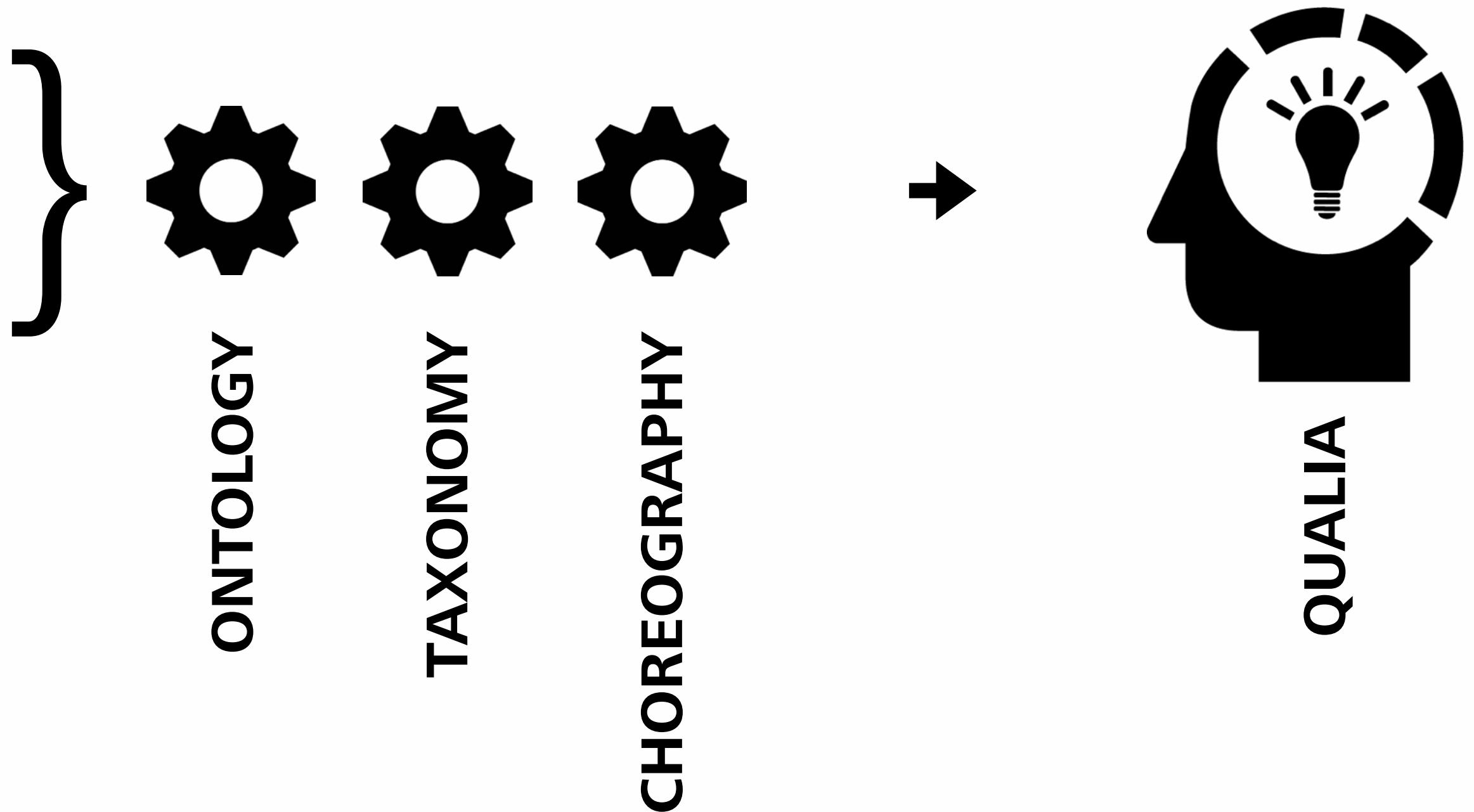




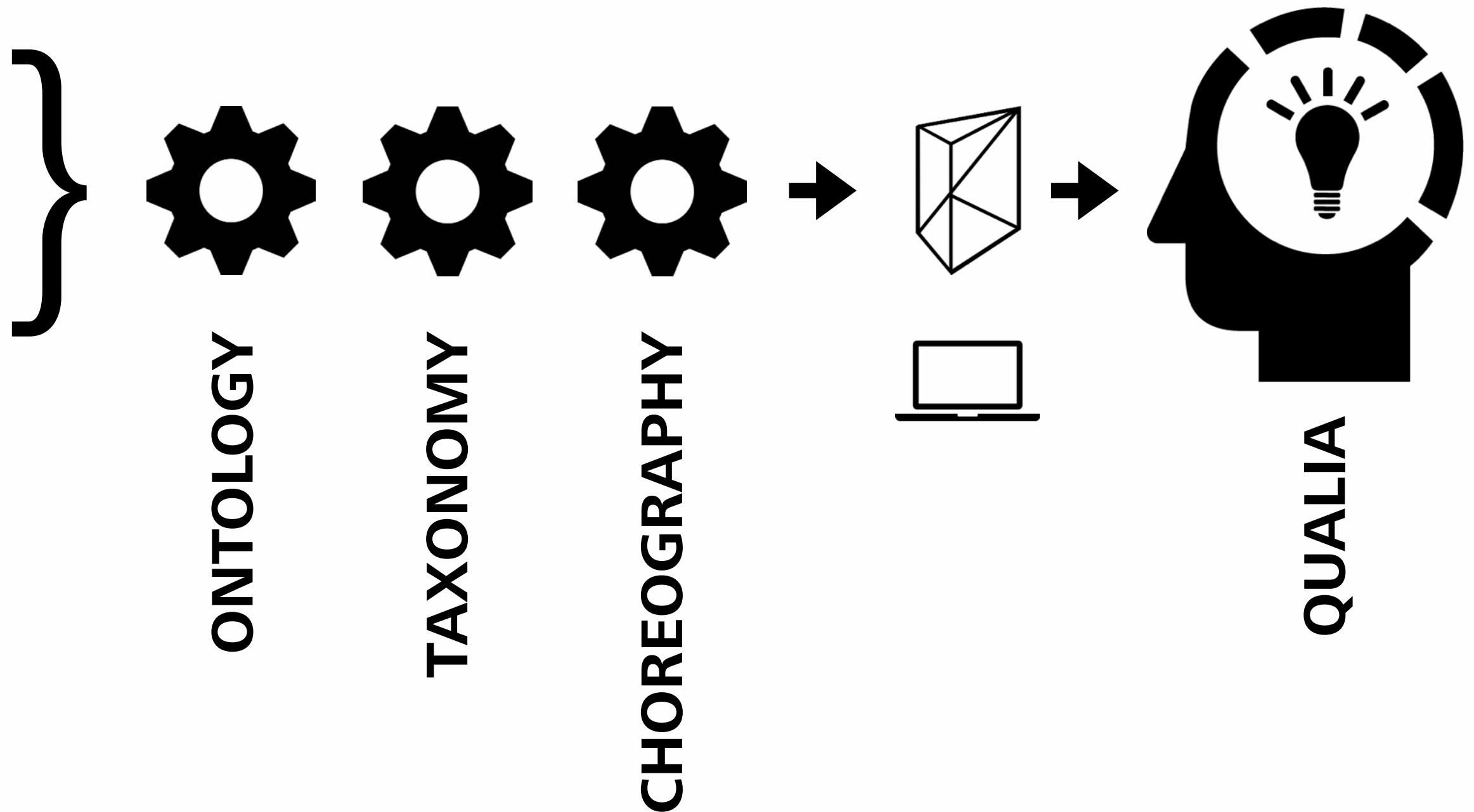


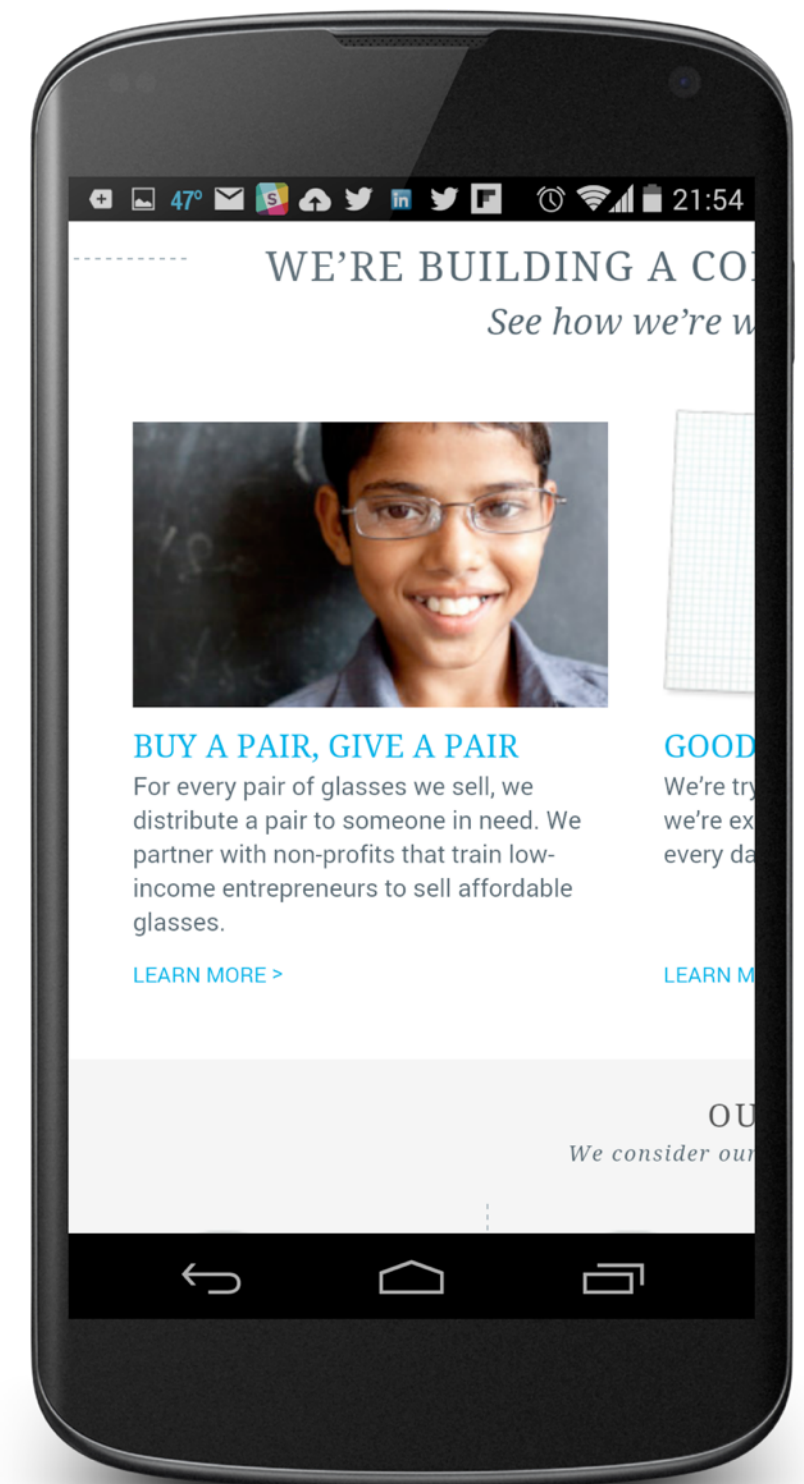
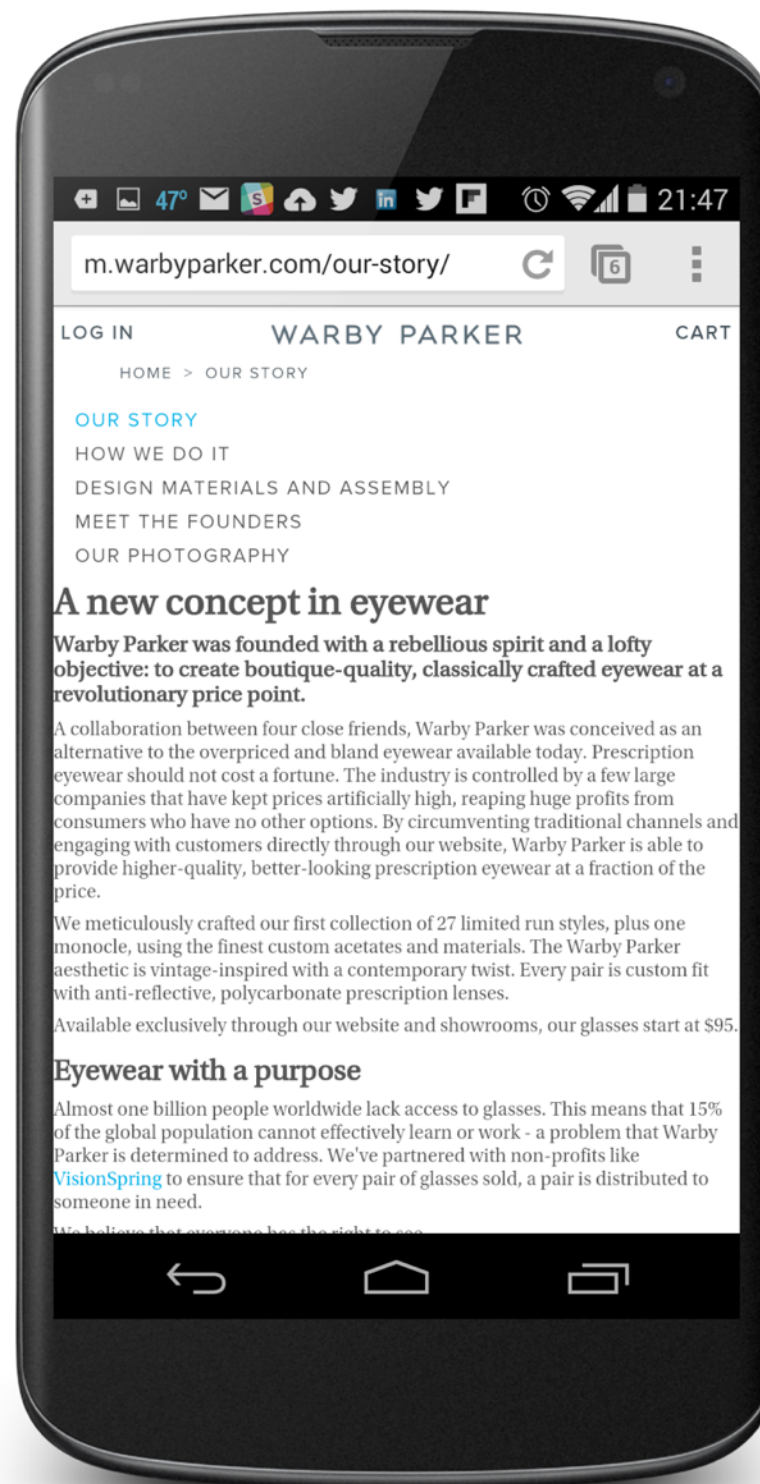
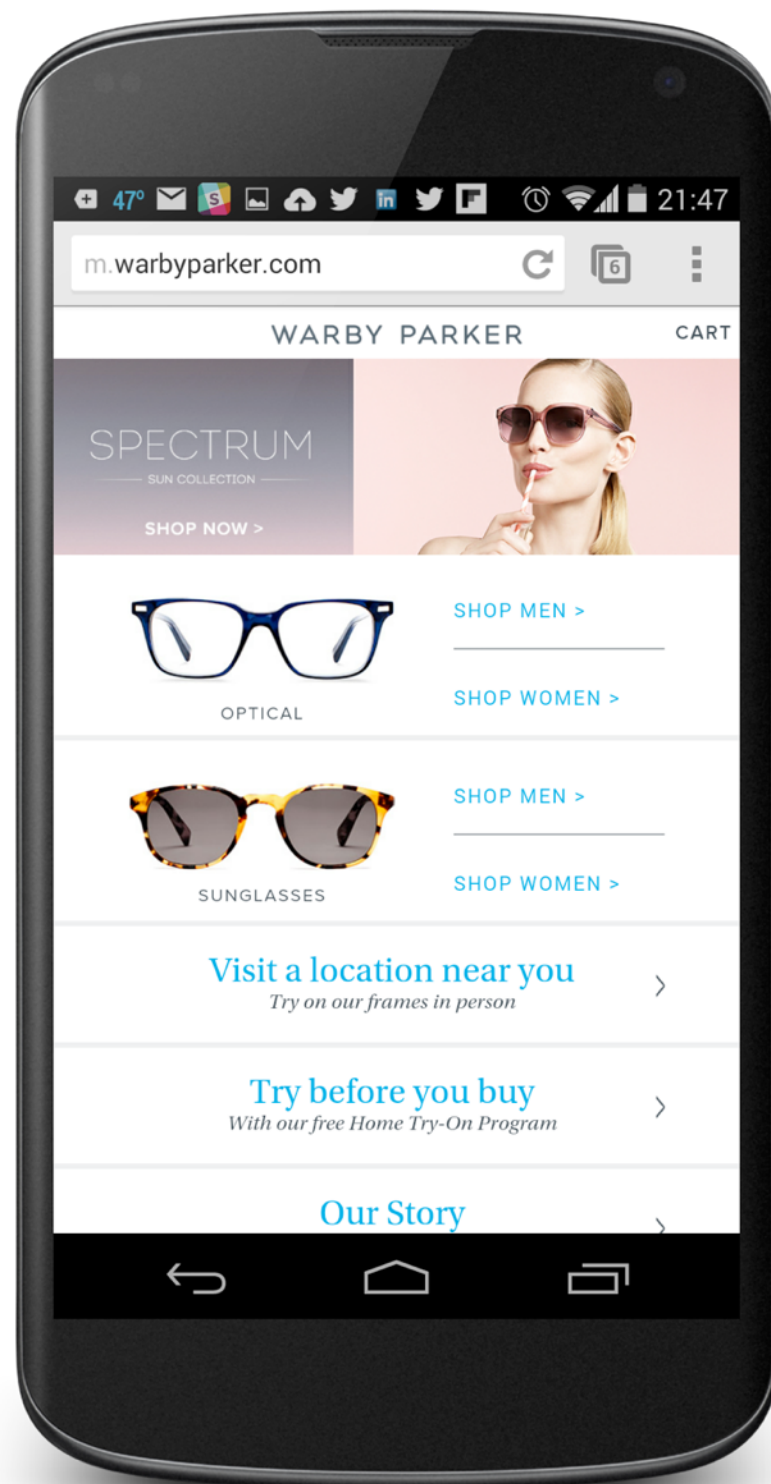


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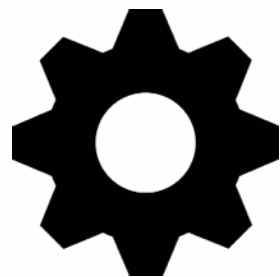
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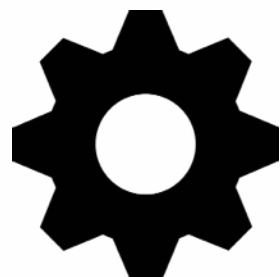




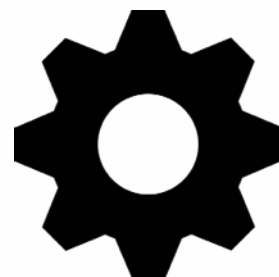
get these actions right, level of meaning making one of the slowest of the fundamental way in our natural world. This has to do with usability. Intuitive interfaces are useable because they leverage operational knowledge we have. An interface is completely intuitive if it must "borrow" from your sphere of experience. As discussed in *The Psychology of User Interfaces*, to us "knowledge in the world" is the interface popularized by the example of this. More specifically, Protect's "wave to hush" is an example that builds on our experience (waving smoke detector to try to shut it up) instantly comprehensible and often overlooked. It's about tapping into deep layers of knowledge that by leveraging more of what we're able to design for loosely and in a natural way, mean associations that are overwritten by an arbitrary, arbitrary association in order to signify; it's not in our experience of innate perceptual abilities. More stable and, ironically, mapping one's use of the interface as swapping out one mental model (the wheel) for another (the touchscreen) loose coupling allows for more rigid (and often brittle) organizational approaches. University of Lethbridge Louise Barrett uses this "assembly" to explain how in robots "a whole variety of effectively exploit specific (y) conditions, along with the use of an animal's body, to give behavior 'on the fly.'" A soft assembly accounts for simple organisms (her and pre-microprocessor) those examples to show how human and animal behavior can be explained by taking fundamental constitutive elements. For those of us tasked with architectures and interaction design, worked physical spaces, the most fundamental level of association is understood (in a mode it is most basically understood) and then articulating that which exploits the intrinsic affordance, allows us to build interaction structures that don't rely on force, convention, or which fit together by the nature of their core structures.



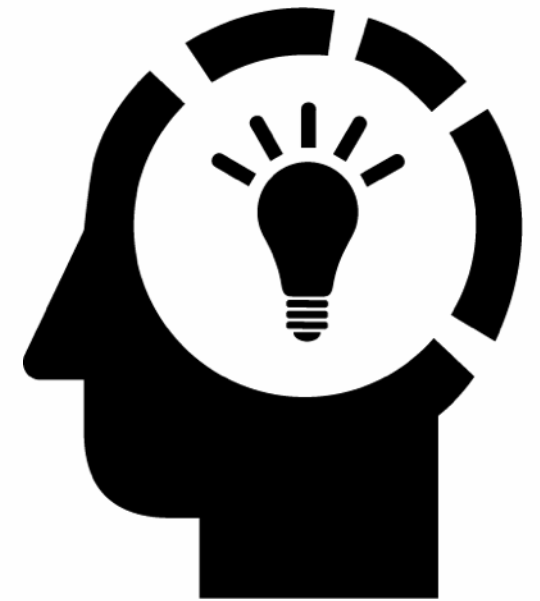
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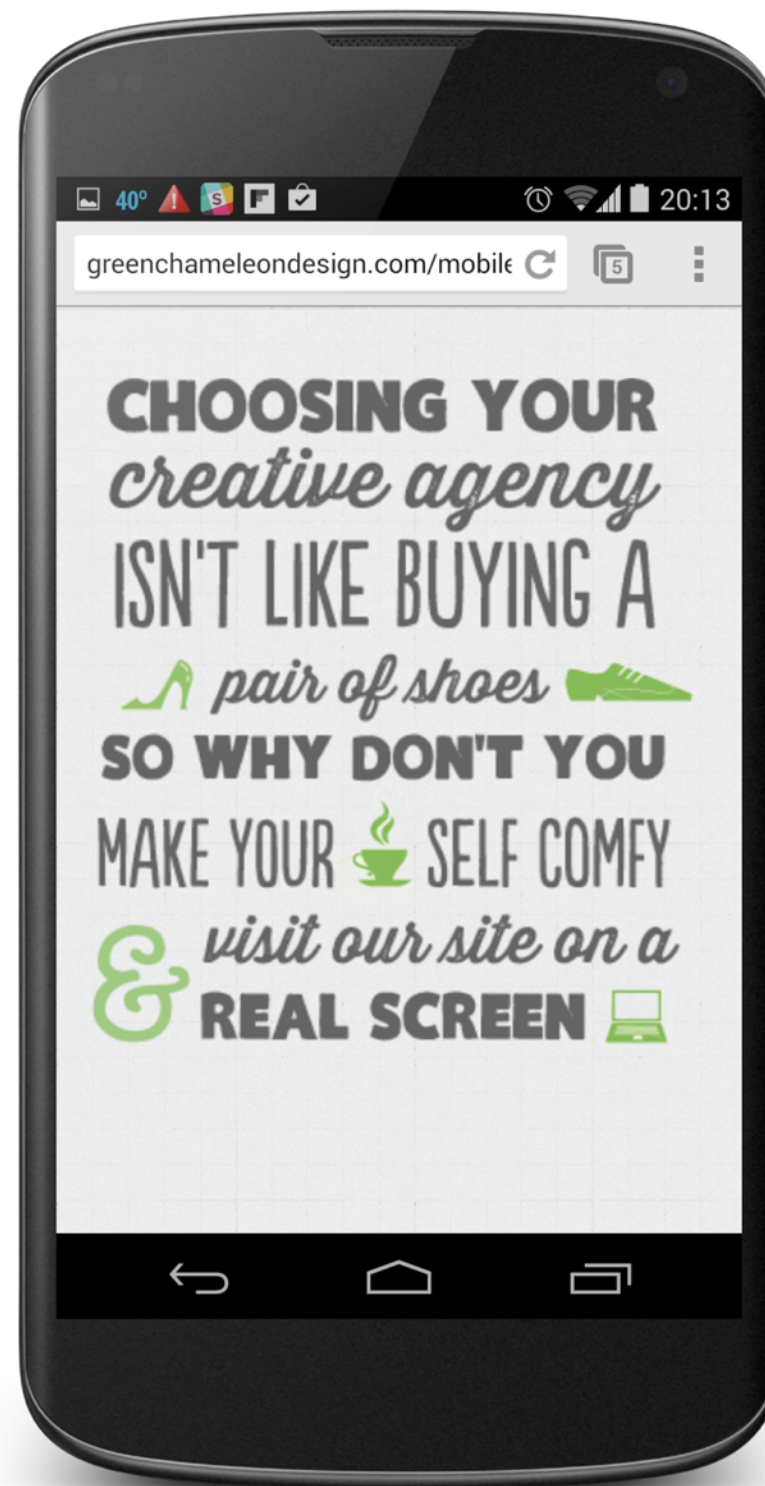


**TAXONOMY**



**CHOREOGRAPHY**





“This makes me want to murder things.”

- @brad\_frost

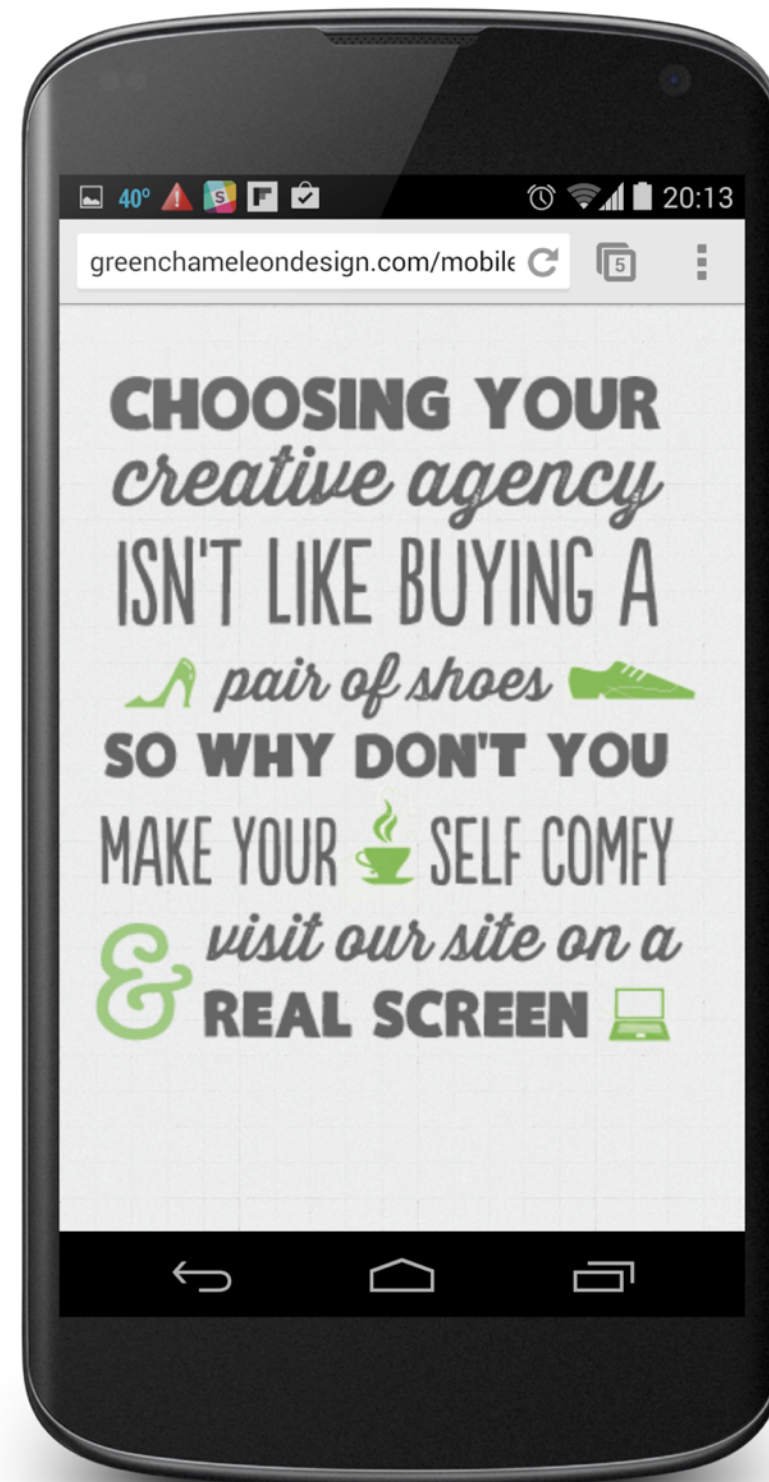
[https://twitter.com/brad\\_frost/status/443371579645624321](https://twitter.com/brad_frost/status/443371579645624321)



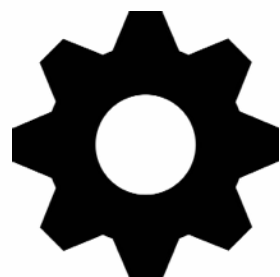
Best Viewed With



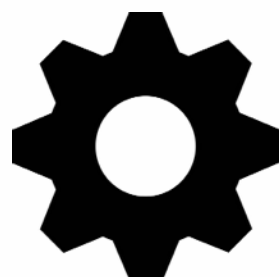
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get these actions right, level of meaning making one of the slowest of the fundamental way in our natural world. This has to do with usability. Intuitive interfaces are useable because they leverage operational knowledge we have. An interface is completely intuitive if it must "borrow" from your sphere of experience. As discussed in *The Psychology of Usability*, to us "knowledge in the world" is the interface popularized by the example of this. More specifically, Protect's "wave to hush" is an example that builds on our experience of interactions (waving smoke detector to try to shut it up) instantly comprehensible and often overlooked, popping into deep layers of that by leveraging more we're able to design for loosely and in a natural mean associations that are overwritten by an arbitrary, signification in order to signify; rooted in our experience of innate perceptual abilities. More stable and, ironically, mapping one's use of the simple as swapping out one mental model (the wheel) for another (the touchscreen) loose coupling allows for to rigid (and often brittle) organizational approaches. University of Lethbridge Louise Barrett uses this assembly" to explain how in robots "a whole variety of effectively exploit specific y) conditions, along with s of an animal's body, to give behavior 'on the fly.'" soft assembly accounts in simple organisms (her and pre-microprocessor those examples to show es of human and animal e be explained by taking fundamental constitutive n. For those of us tasked itectures and interaction worked physical spaces, most fundamental level ciation is understood (in mode it is most basically and then articulating that that exploits the intrinsic nment, allows us to build tion structures that don't ner by force, convention, which fit together by the e of their core structures.



**ONTOLOGY**



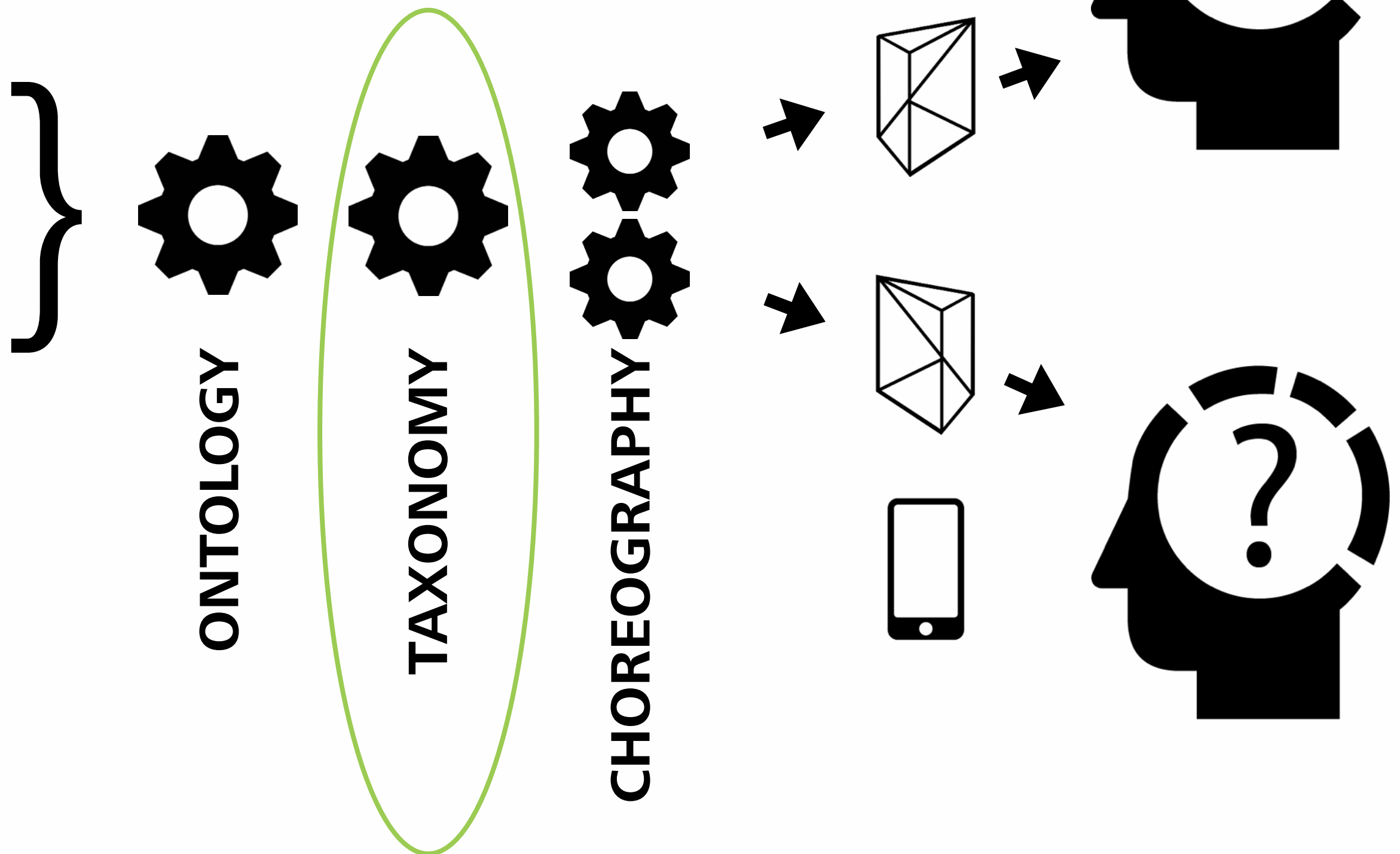
**TAXONOMY**



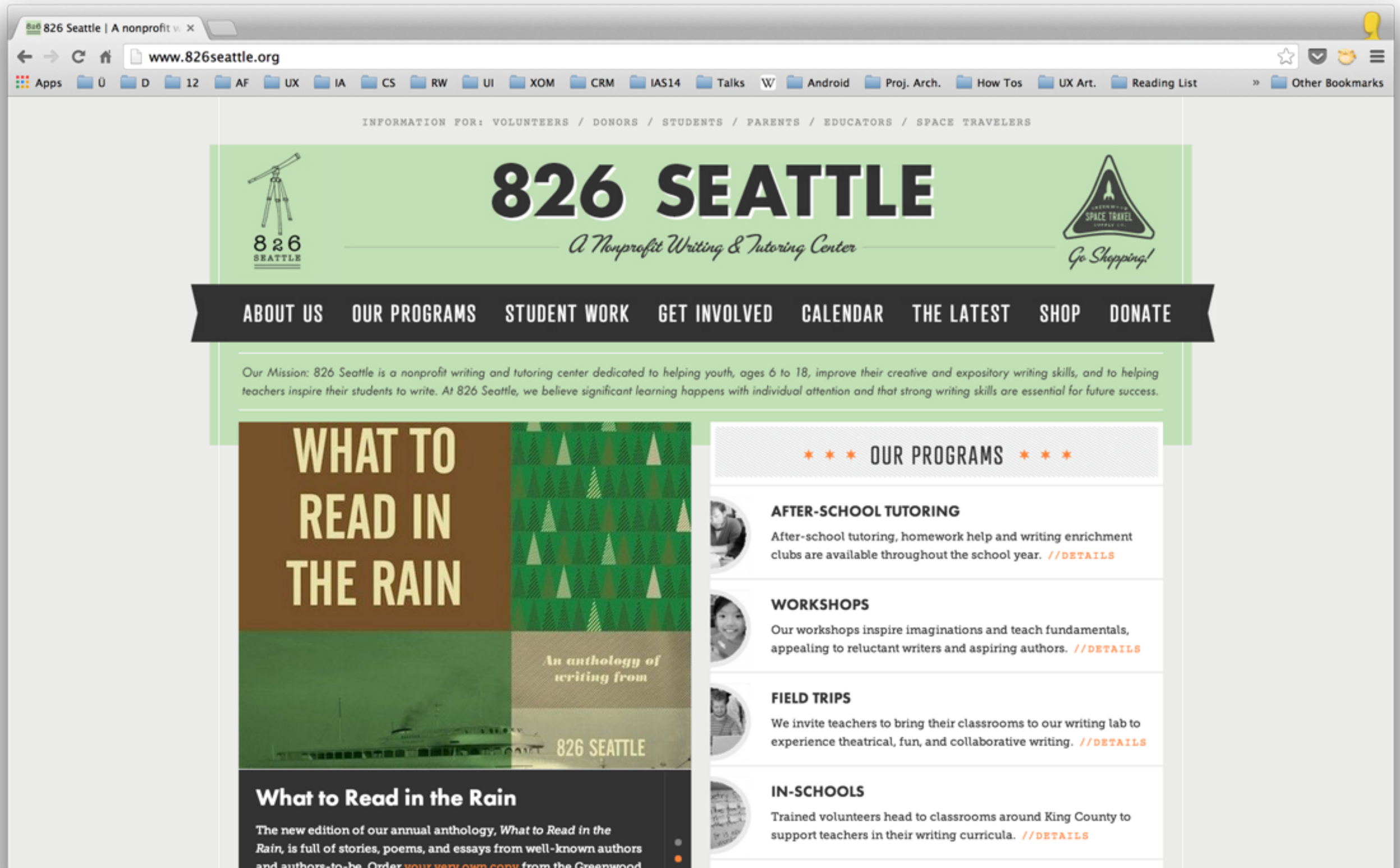
**CHOREOGRAPHY**

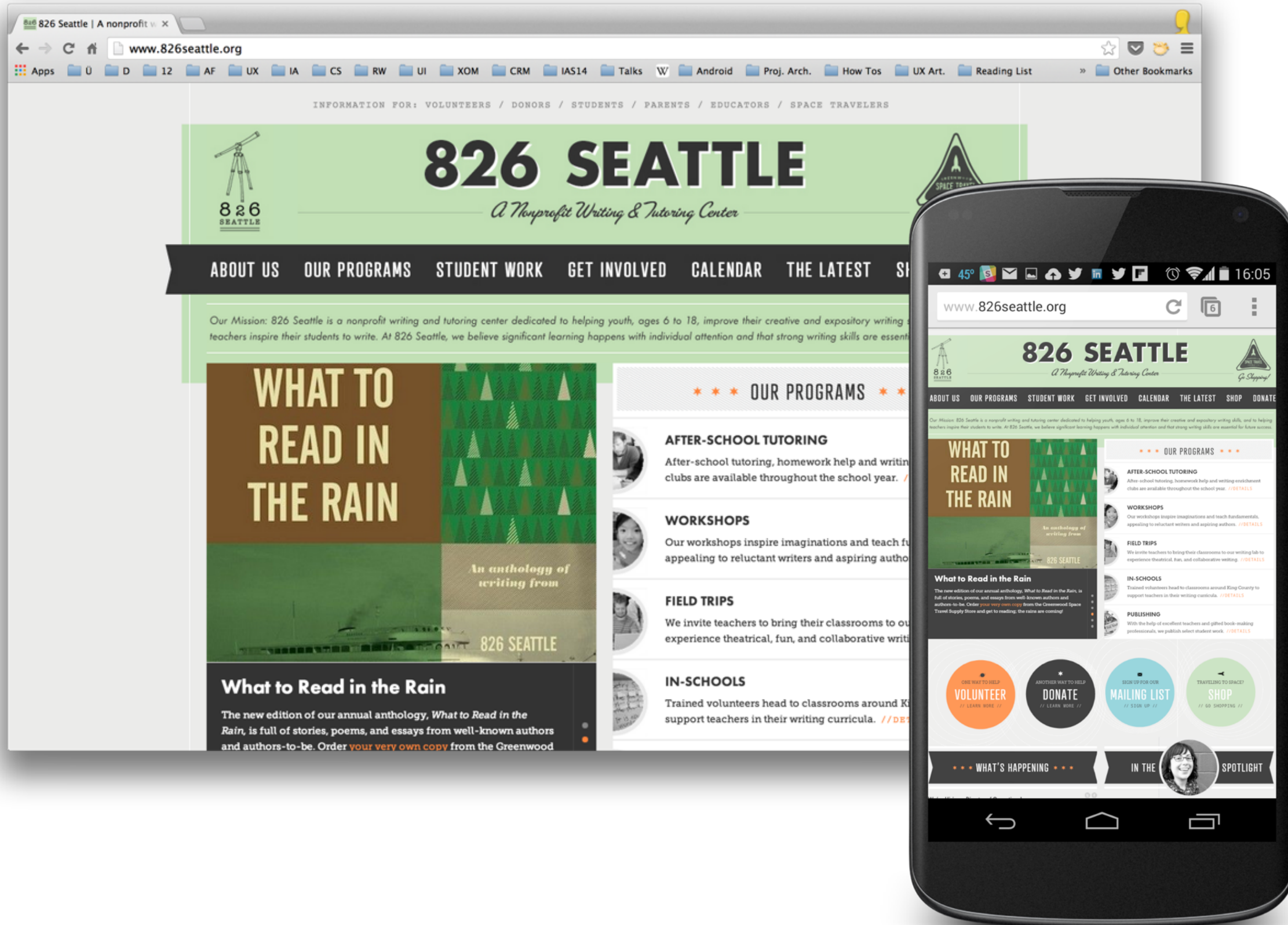


get these actions right, level of meaning making one of the slowest of the fundamental way in our natural world. This has to do with usability. Intuitive interfaces are useable because they leverage operational knowledge we have. An interface is completely intuitive if it must "borrow" from your sphere of experience. As discussed in *The Psychology of Human-Computer Interaction*, to us "knowledge in the domain" is the interface popularized by the example of this. More specifically, Protect's "wave to hush" is an example that builds on our experience (waving smoke detector to try to shut it up) instantly comprehensible and often overlooked. It's about tapping into deep layers of knowledge that by leveraging more of what we're able to design for loosely and in a natural way, mean associations that are overwritten by an arbitrary, arbitrary signification in order to signify; it's about tapping into our experience of innate perceptual abilities. More stable and, ironically, mapping one's use of the interface as swapping out one's mental model (the wheel for another (the touchscreen) loose coupling allows for more to rigid (and often brittle) organizational approaches. University of Lethbridge Louise Barrett uses this assembly" to explain how in robots "a whole variety of effectively exploit specific (y) conditions, along with the use of an animal's body, to give behavior 'on the fly.'" A soft assembly accounts for simple organisms (her and pre-microprocessor those examples to show how human and animal behavior can be explained by taking fundamental constitutive elements. For those of us tasked with architectures and interaction design, worked physical spaces, the most fundamental level of association is understood (in a mode it is most basically understood and then articulating that that exploits the intrinsic elements, allows us to build interaction structures that don't emerge by force, convention, which fit together by the nature of their core structures.









# Building Flexible Taxonomies

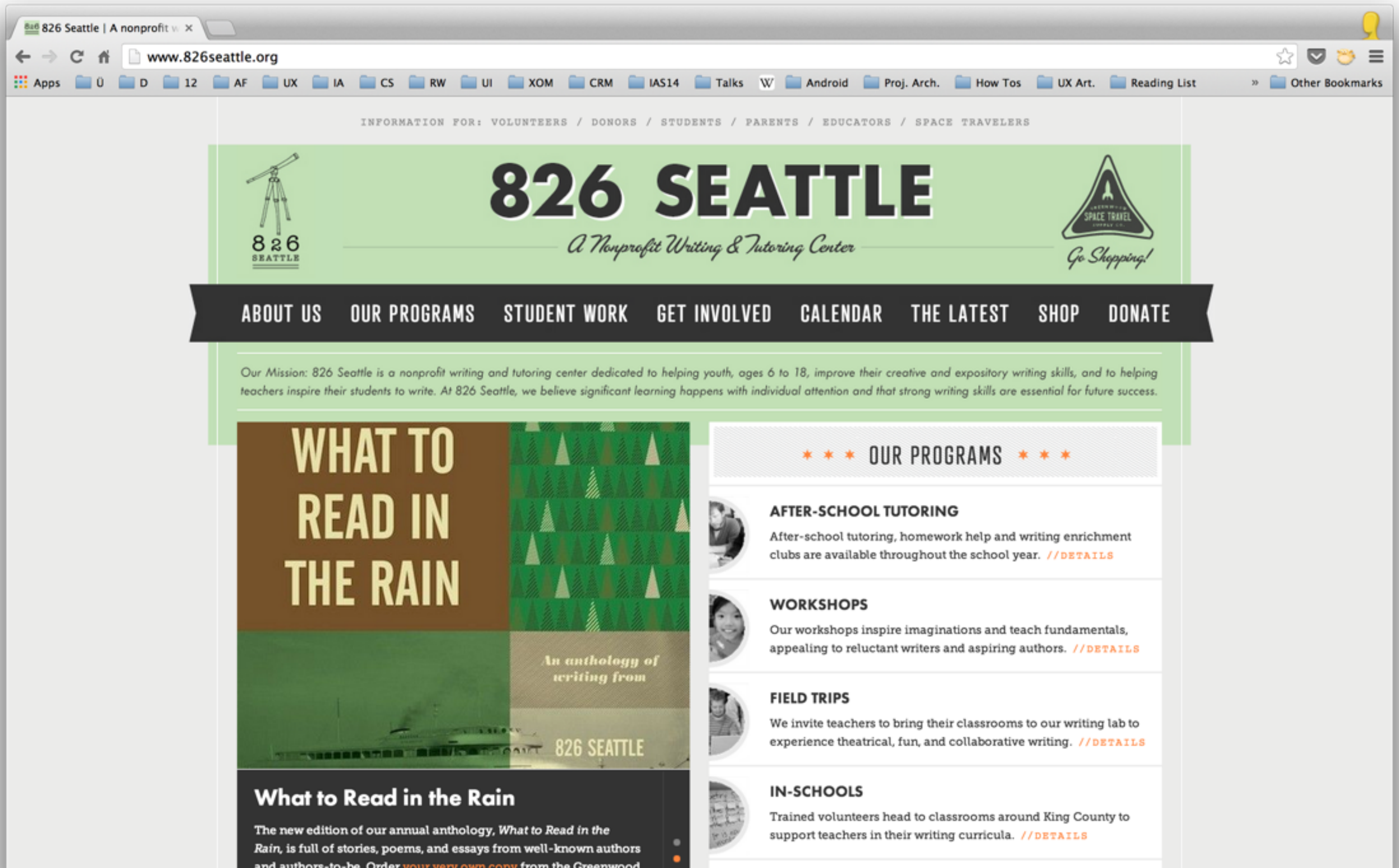
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Adapted from *The Accidental Taxonomist*  
by Heather Hedden



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INFORMATION FOR: VOLUNTEERS / DONORS / STUDENTS / PARENTS / EDUCATORS / SPACE TRAVELERS



# 826 SEATTLE

*A Nonprofit Writing & Tutoring Center*



ABOUT US

OUR PROGRAMS

STUDENT WORK

GET INVOLVED

CALENDAR

THE LATEST

SHOP

DONATE

*Our Mission: 826 Seattle is a nonprofit writing and tutoring center dedicated to helping youth, ages 6 to 18, improve their creative and expository writing skills, and to helping teachers inspire their students to write. At 826 Seattle, we believe significant learning happens with individual attention and that strong writing skills are essential for future success.*

## WHAT TO READ IN THE RAIN

*An anthology of  
writing from*

### ★ ★ ★ OUR PROGRAMS ★ ★ ★



#### AFTER-SCHOOL TUTORING

After-school tutoring, homework help and writing enrichment clubs are available throughout the school year. [//DETAILS](#)



#### WORKSHOPS

Our workshops inspire imaginations and teach fundamentals, appealing to reluctant writers and aspiring authors. [//DETAILS](#)



#### FIELD TRIPS



# Building Flexible Taxonomies

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826 Seattle Taxonomy Audit.xlsx

Search in Sheet

Home Layout Tables Charts SmartArt Formulas Data Review

Font: Calibri (Body) 13

Alignment: Wrap Text

Number: Text

Format: Activity, Alphabet, Audience, Category, Hierarchy, Location

Cells: Insert, Delete, Format

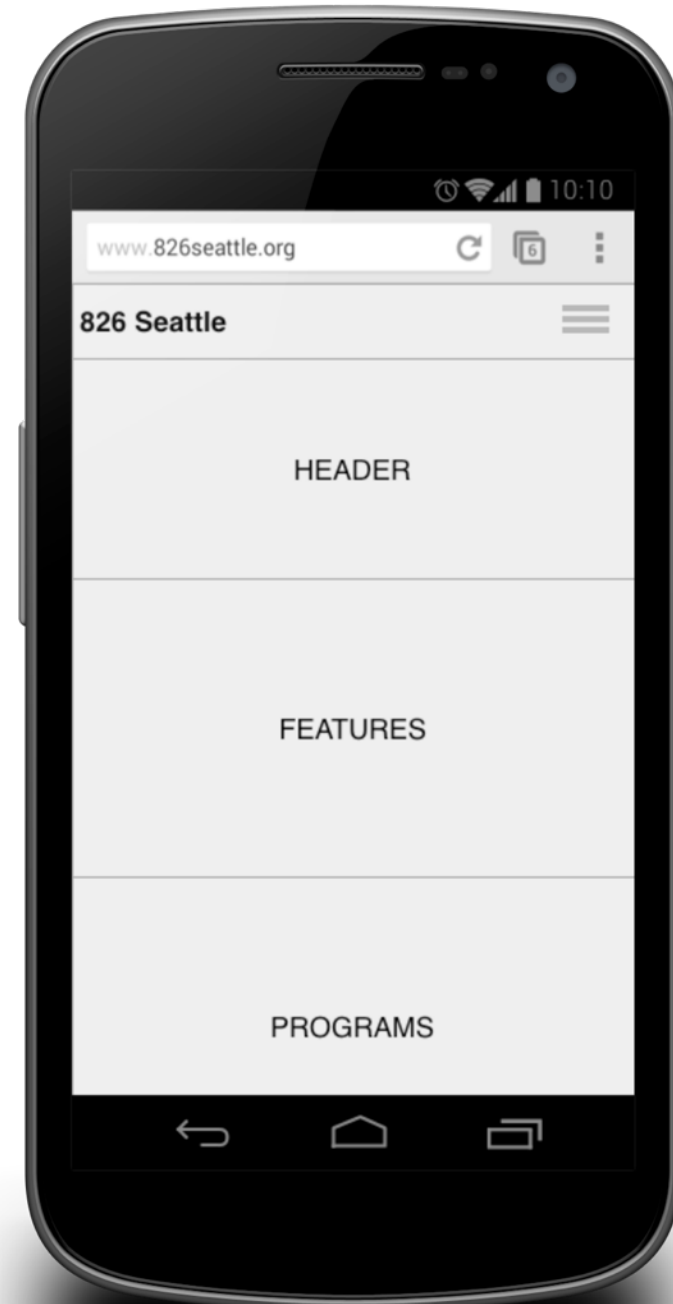
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1	826 Seattle Taxonomy Audit // 3.1.14 // Andy Fitzgerald							
2	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Notes	
3	About 826							
4		history, mission						
5		staff						
6		leadership						
7		<internship>						
8		media						
9		-> store						
10		contact						
11								
12	Programs						Currently arranged by locaton (826, school, field trip) and time (after school, Sat	
13		after school tutoring						
14		in school events						
15		publications						
16		workshops						
17		field trips						
18								
19	Student work							
20		(work titles)						
21								
22	Getting Involved							
23		volunteer						
24		donate						
25		employer matching						
26		supporters						
27		students						
28		parents						
29		educators						
30								
31	Calendar							
32		(date entries)					events, in-school, after school, field trips, workshops, volunteering, miscellaneo	
33								
34	News							

Audit Rev 1 People Activities Location Time

Normal View Ready Sum=0







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Activity Alphabet Audience Category Hierarchy Location Insert Delete Format Themes Aa

H1

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4		community					
5			consume services				
6				students			
7				parents			
8				educators			
9			provide services				
10				volunteers			
11		826 Organization					
12			provide services				
13				staff			
14			direct services				
15				826 Seattle leadership			
16				National advisory board			
17				student advisory board			
18			support organization				
19				donors			
20				volunteers			
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2	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
3	<b>Information</b>				
4		<b>About 826</b>			
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7			<b>contact</b>		
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9		<b>Programs</b>			
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12				<b>workshops</b>	
13					
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15				<b>in school events</b>	
16				<b>field trips</b>	
17		<b>Activities</b>			
18			<b>Publications</b>		
19			<b>Support</b>		
20				<b>Volunteer</b>	
21				<b>Donate</b>	
22	<b>Involvement</b>				
23		<b>Learn</b>			
24			<b>students</b>		
25			<b>parents</b>		
26			<b>educators</b>		
27					
28		<b>Volunteer</b>			

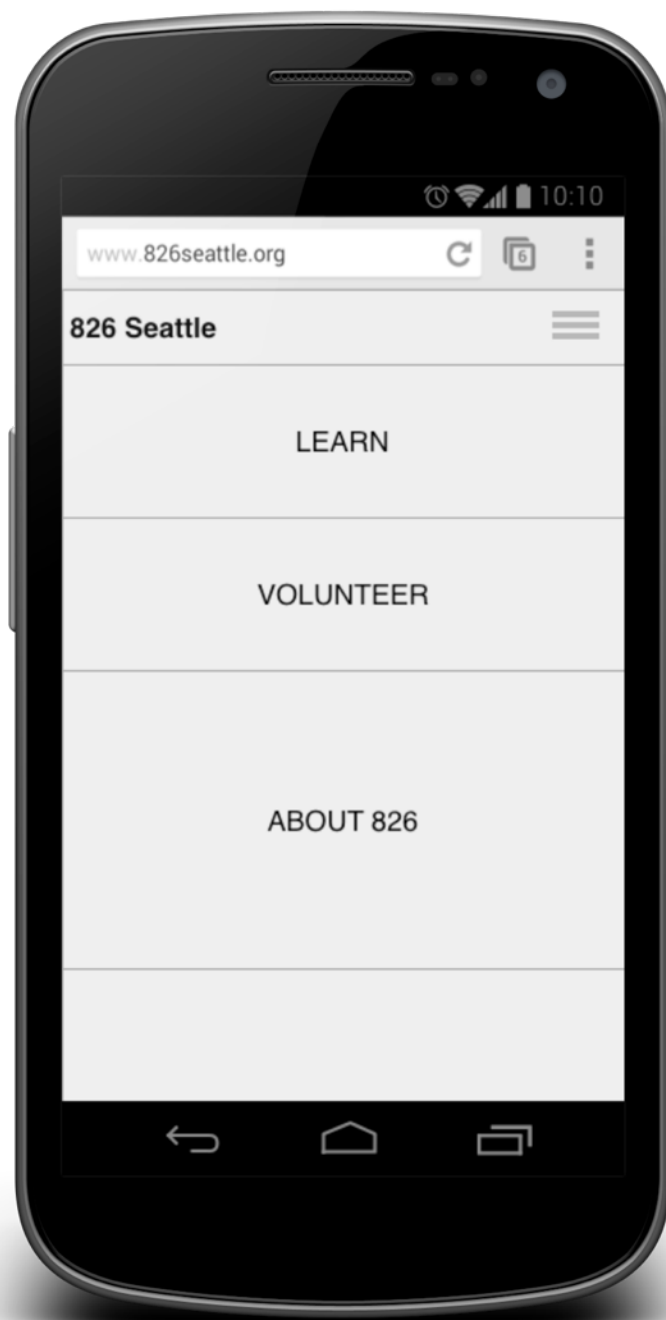
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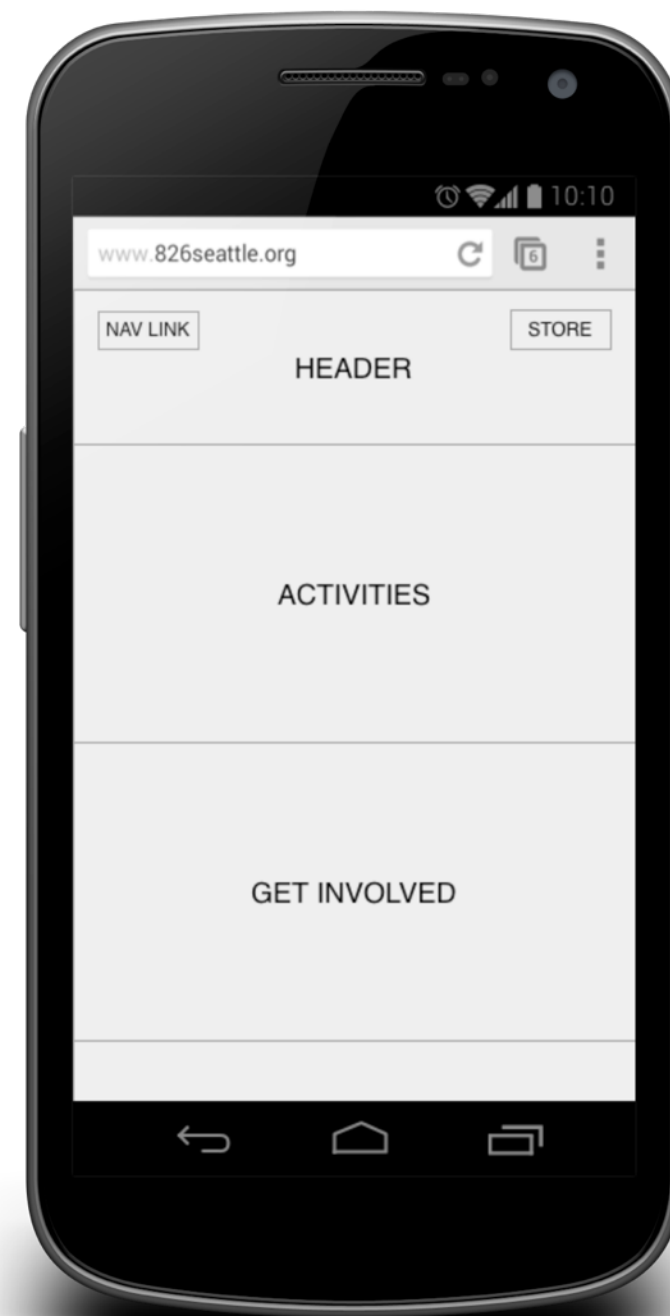
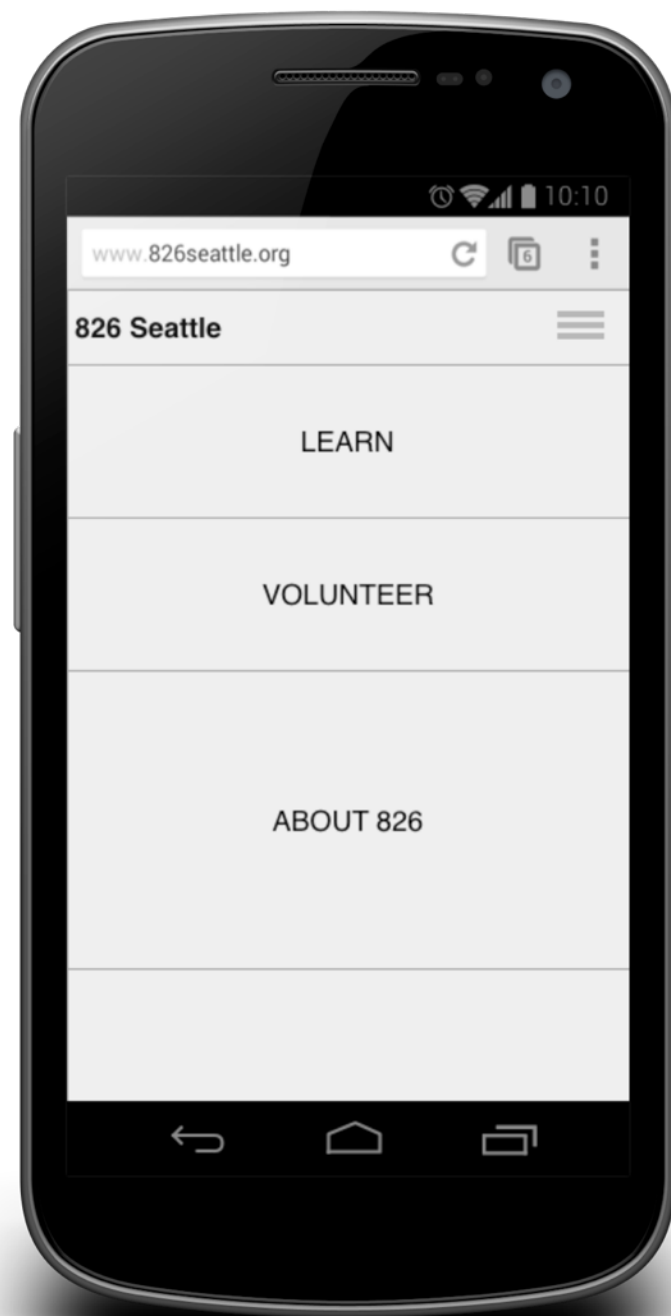
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“Embracing ambiguity — embracing the possibility of not understanding exactly how the pieces fit together — means designing systems that surpass our expectations of them.”

- Luca Rosati. *Embracing ambiguity:  
Ambiguity as an emerging design pattern*

<http://pervasiveia.com/blog/embracing-ambiguity>

HealthMed:  
building flexible taxonomies.



# Composite Taxonomies

- HealthMed term cards
- Concept map
- Brief brief
- Post-Its
- Drafting dots

# Composite Taxonomies

20 minutes

- Identify a design concept based on your audience
- Based on your brief, group your terms
  - Create category labels (blank cards)
  - Note any relevant attributes (Post-It notes)
- Identify and elaborate salient dimensions
  - Can be Post-Its or sketched
- Call out flexible taxonomic elements
  - Where does your taxonomy bend?

# Composite Taxonomies

10 minutes

- What is your design concept?
- What are your salient dimensions?
- Where are the points of articulation in your taxonomy?

# Break

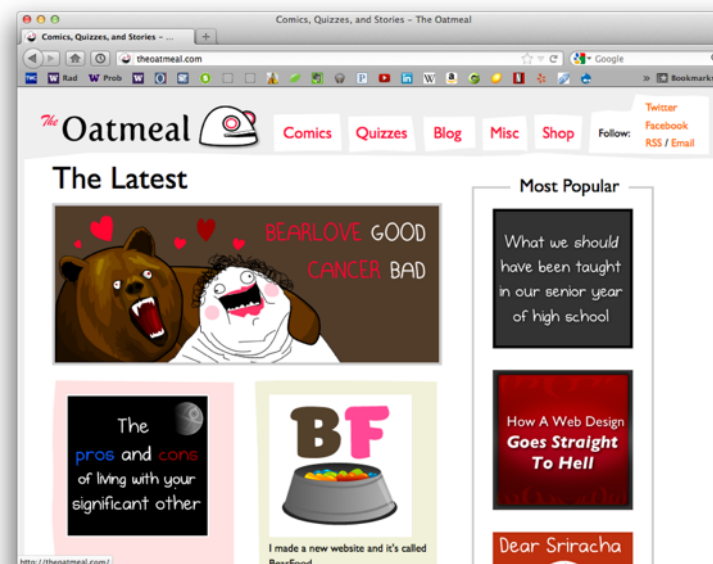
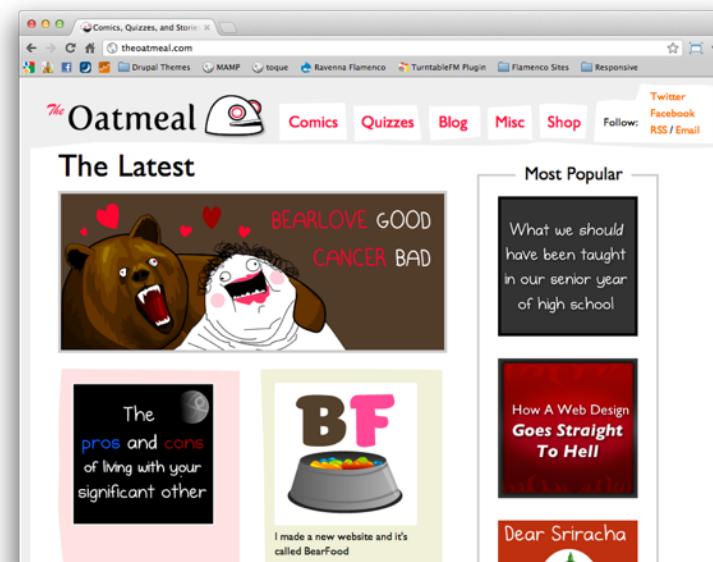
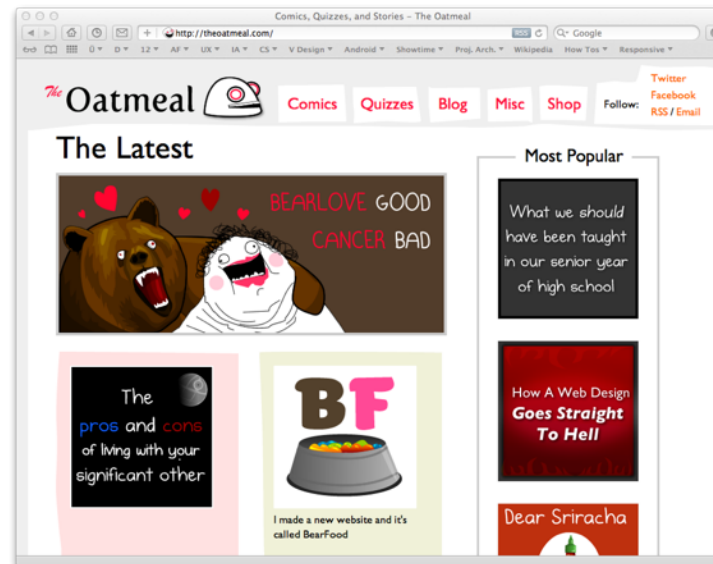
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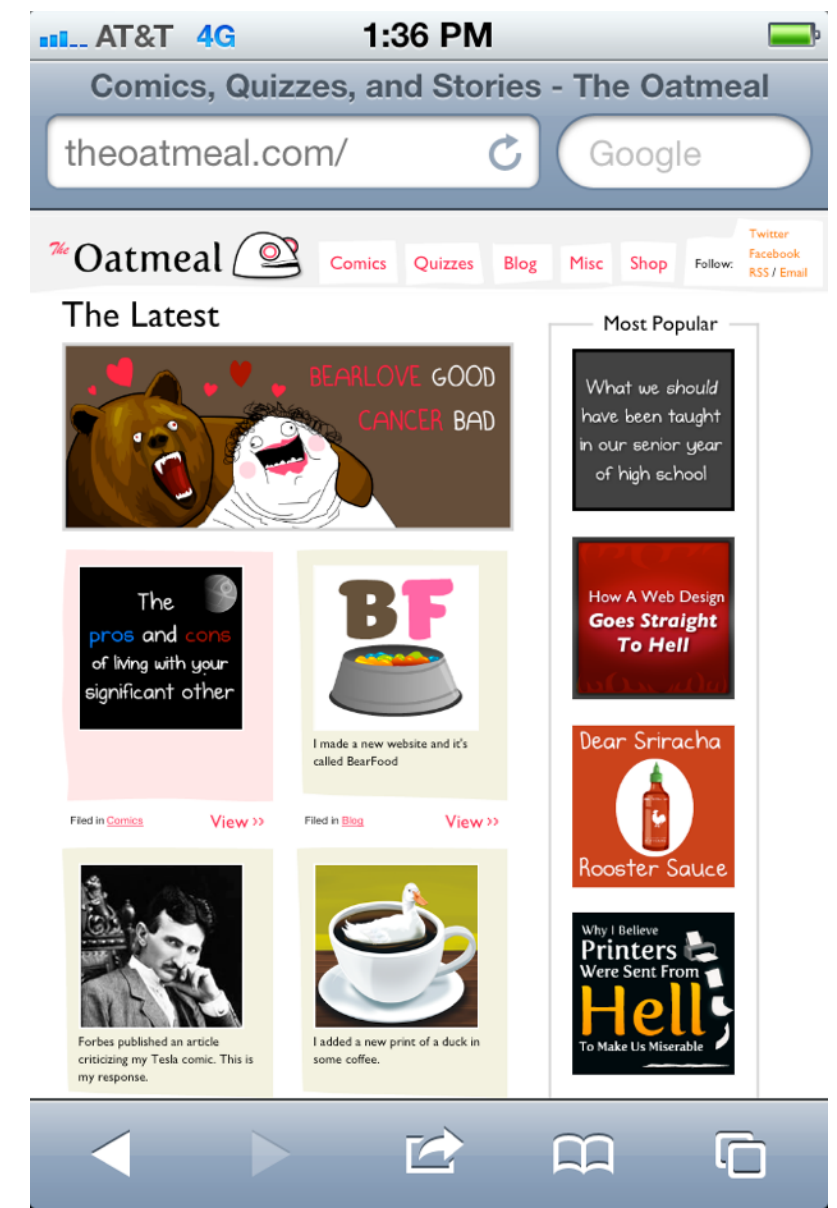
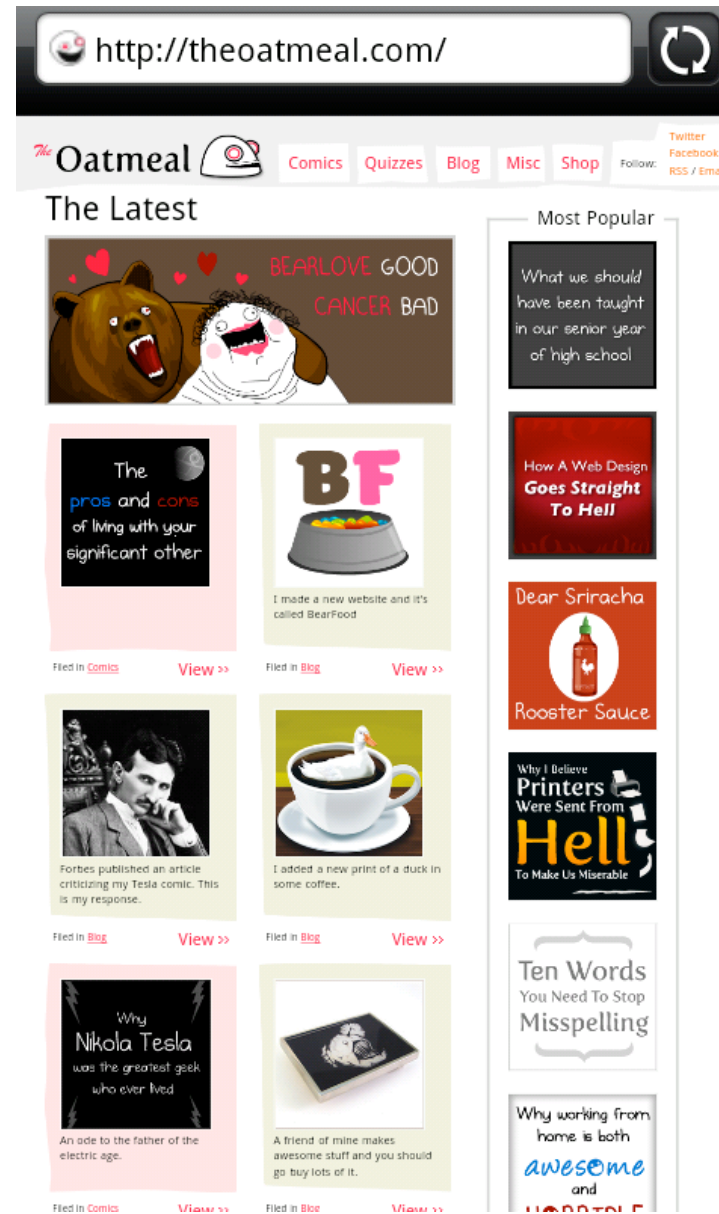
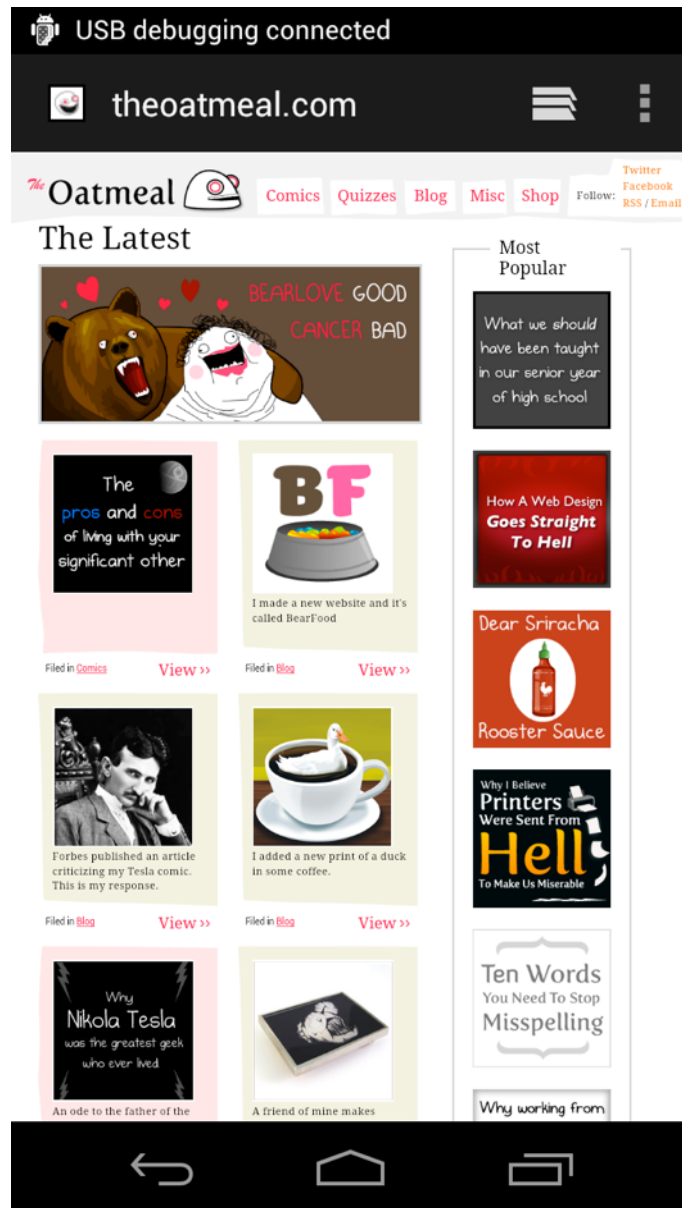
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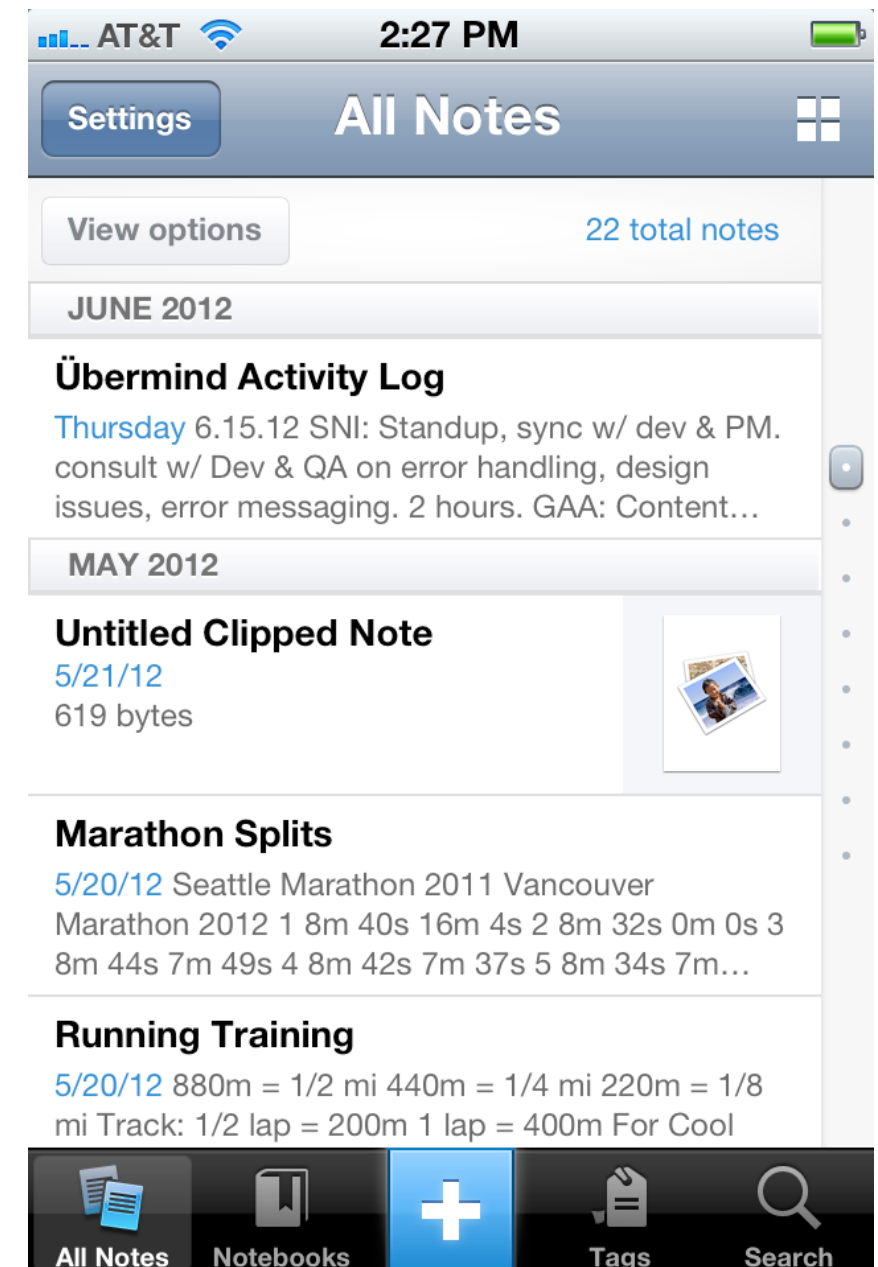
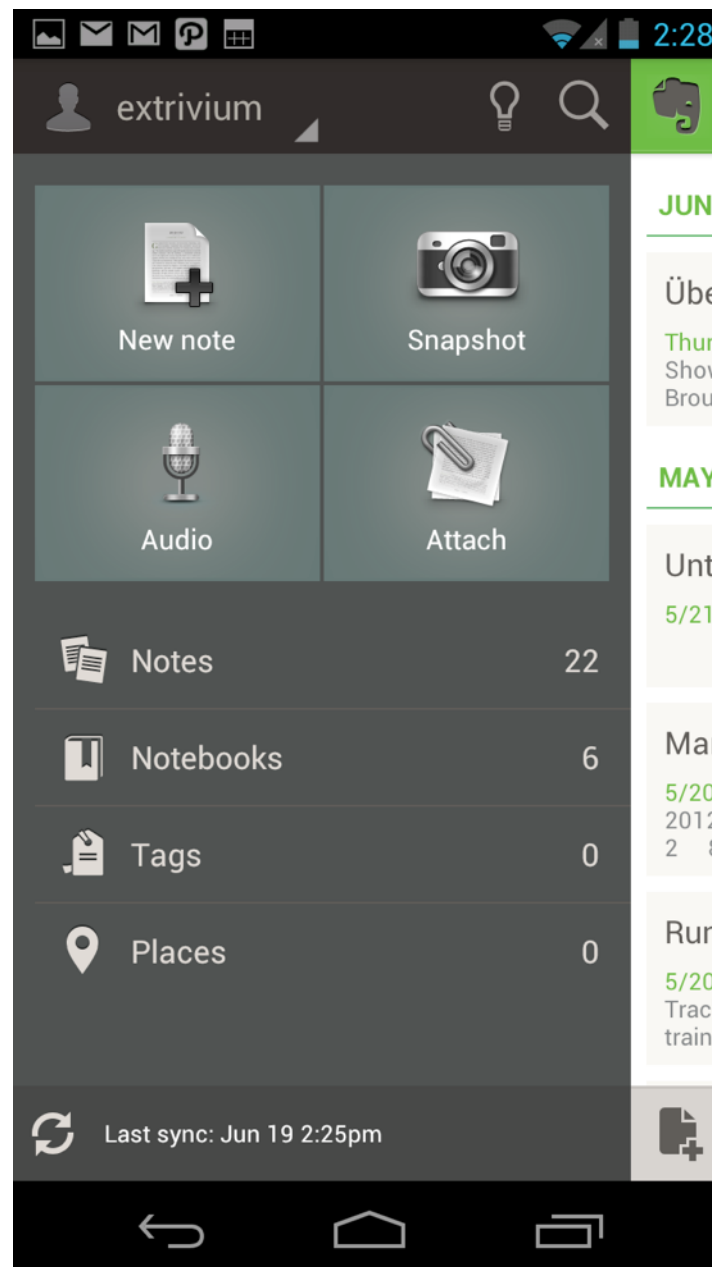
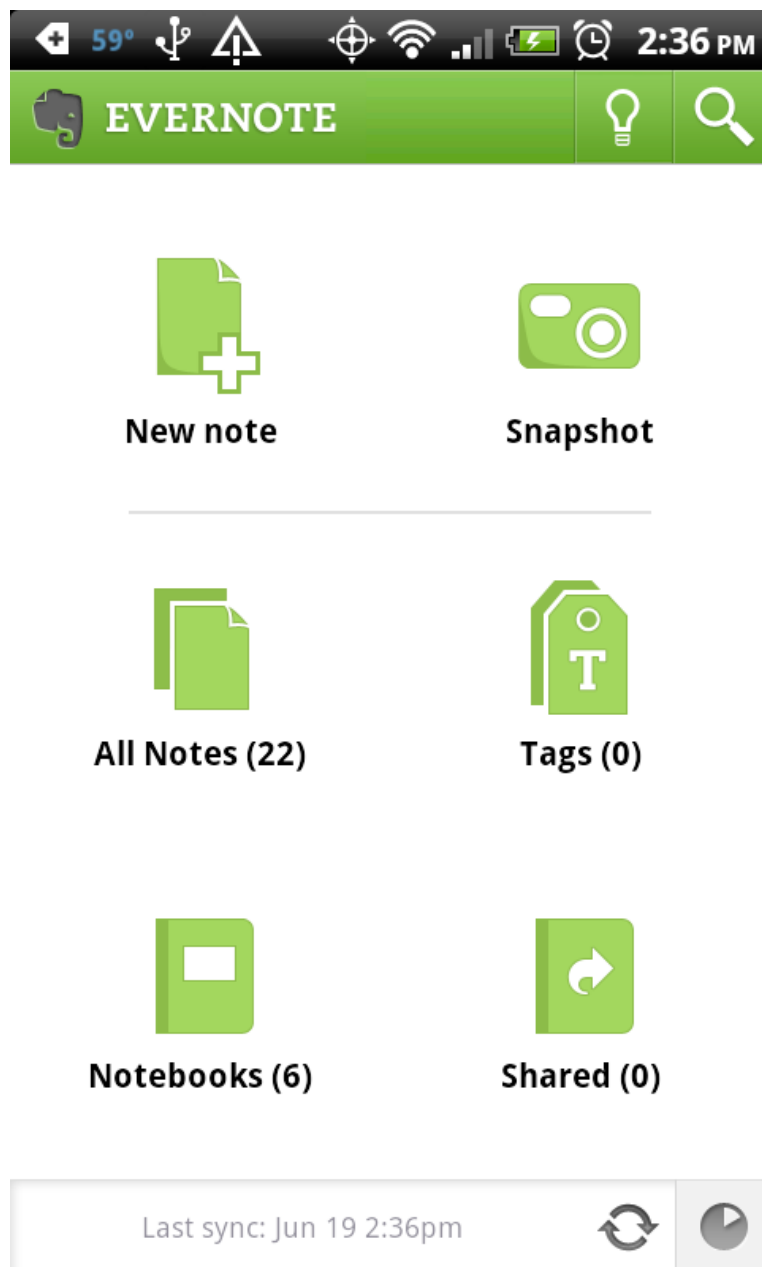
@andybywire



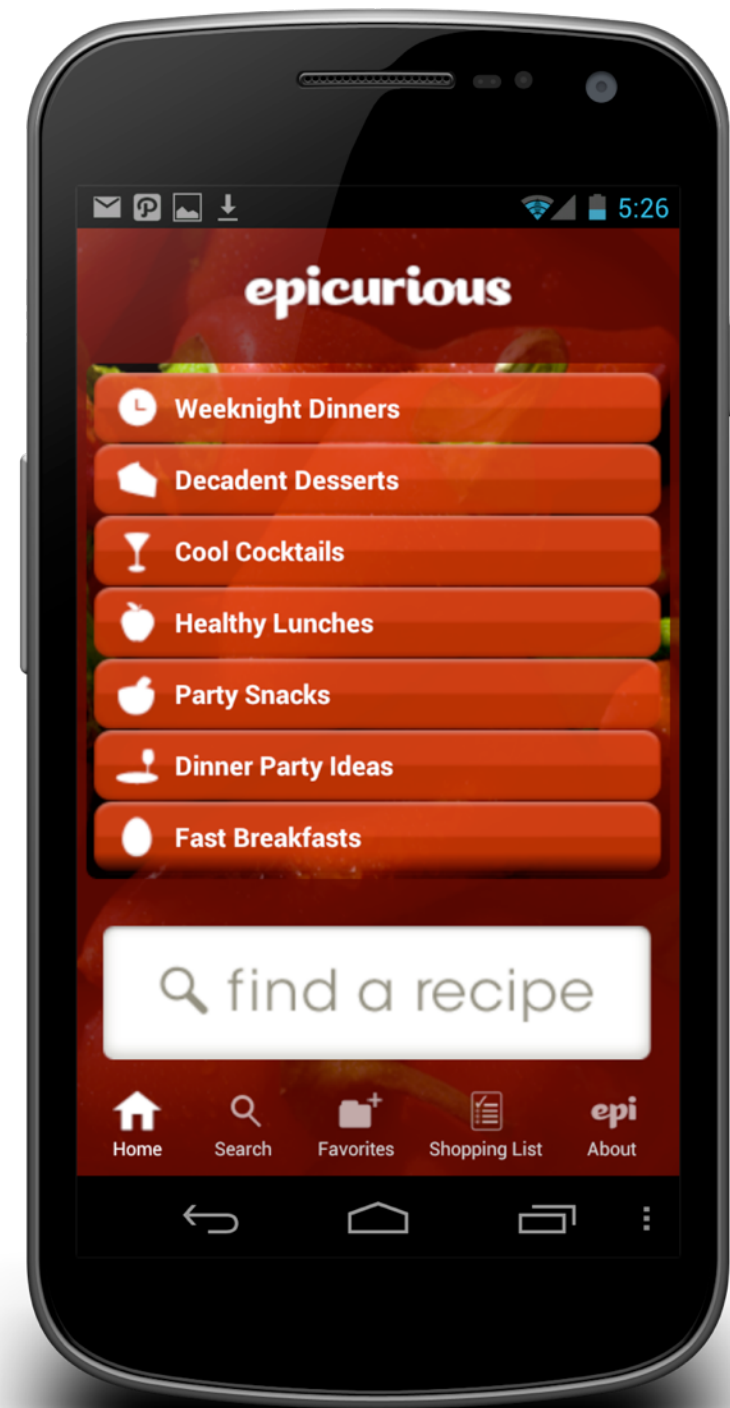
From IA to UI.

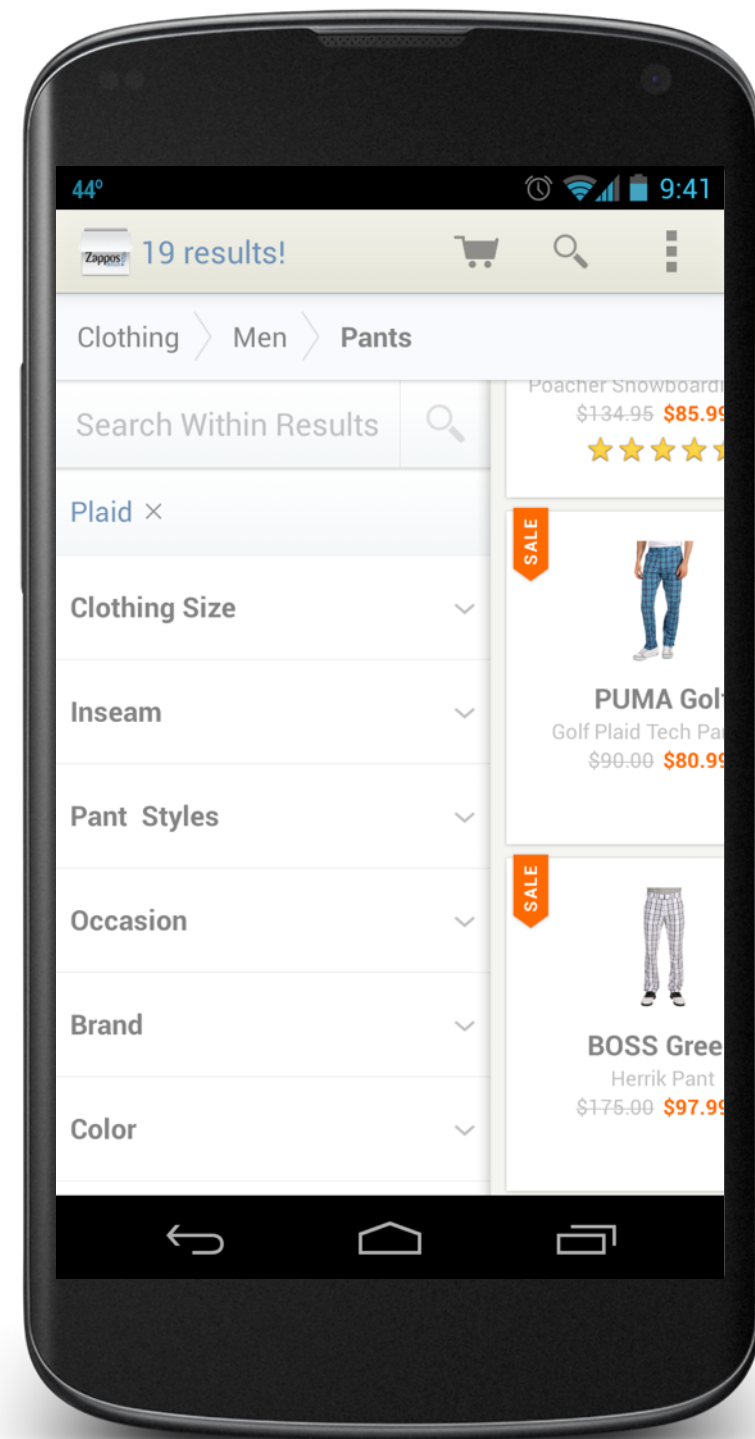
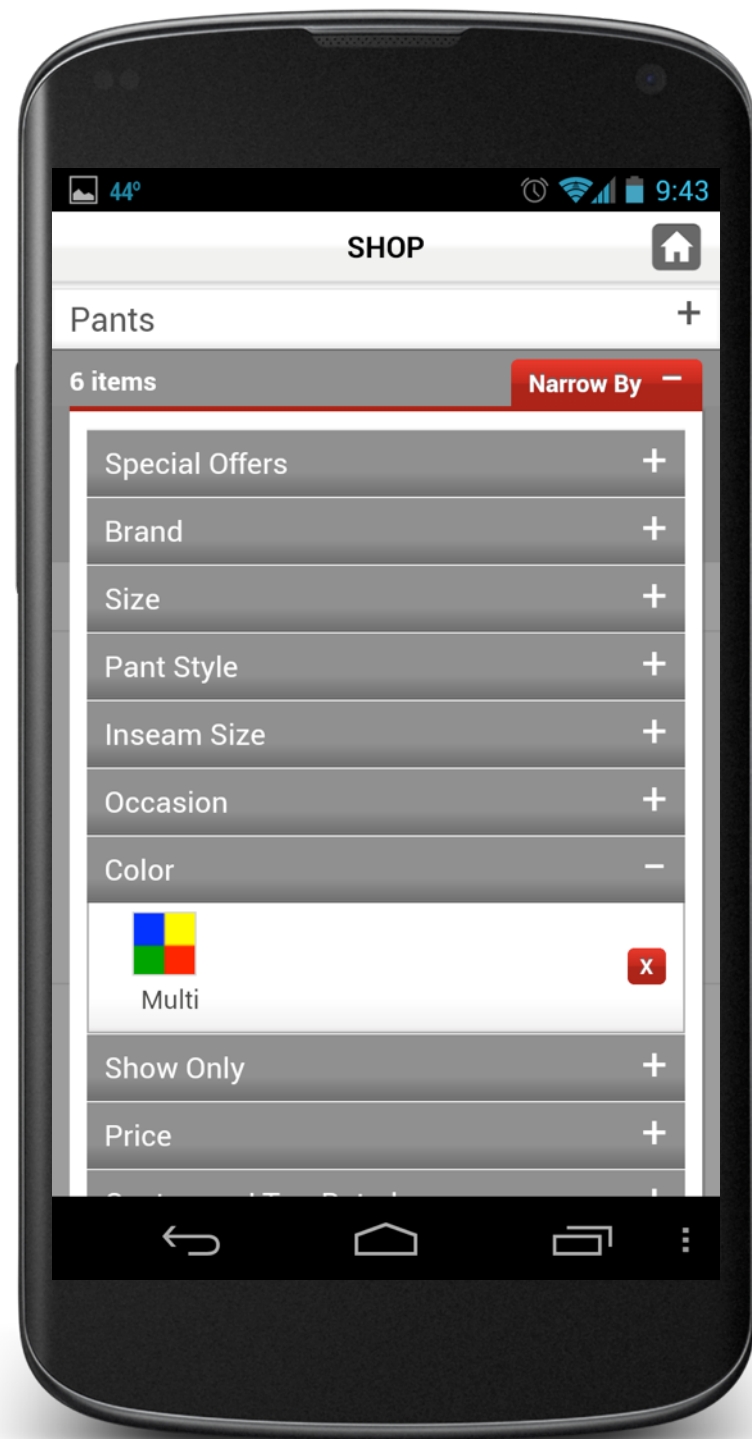






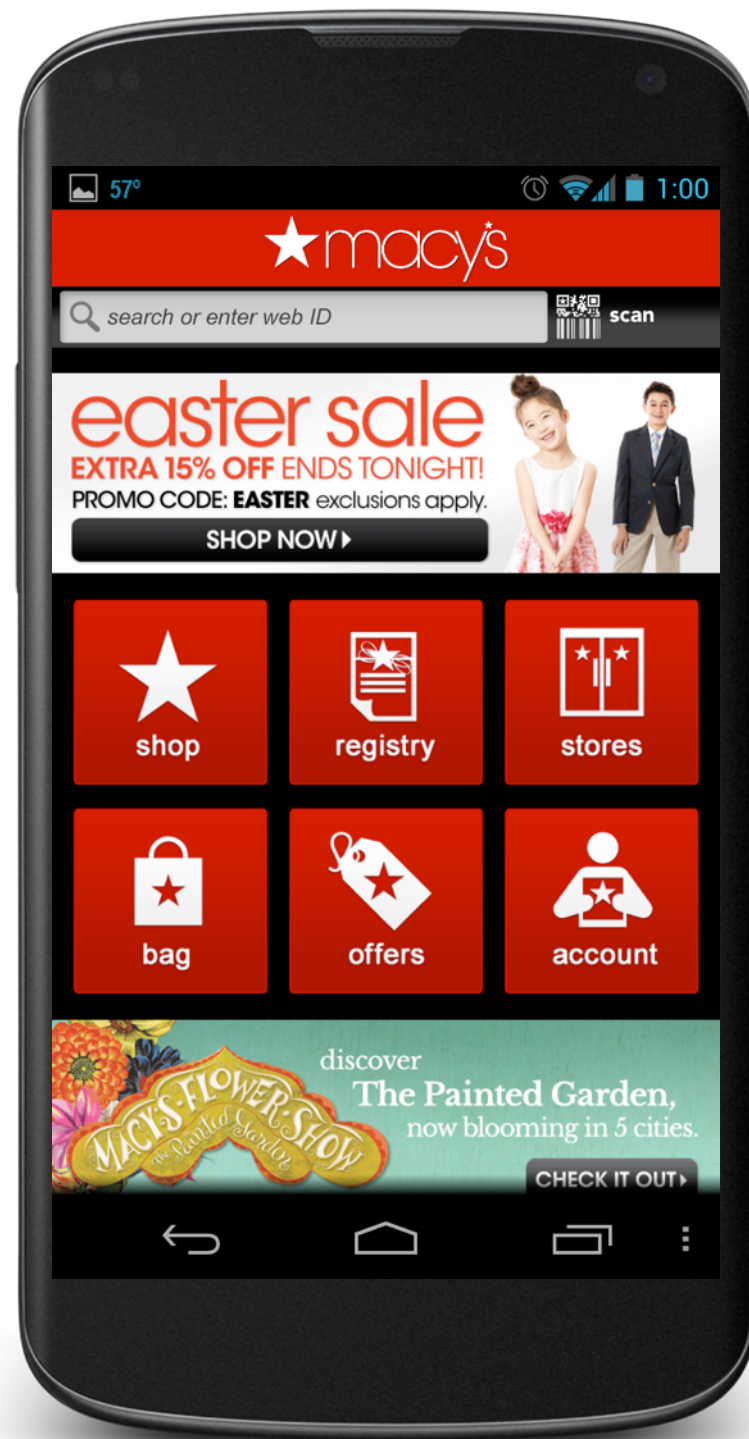




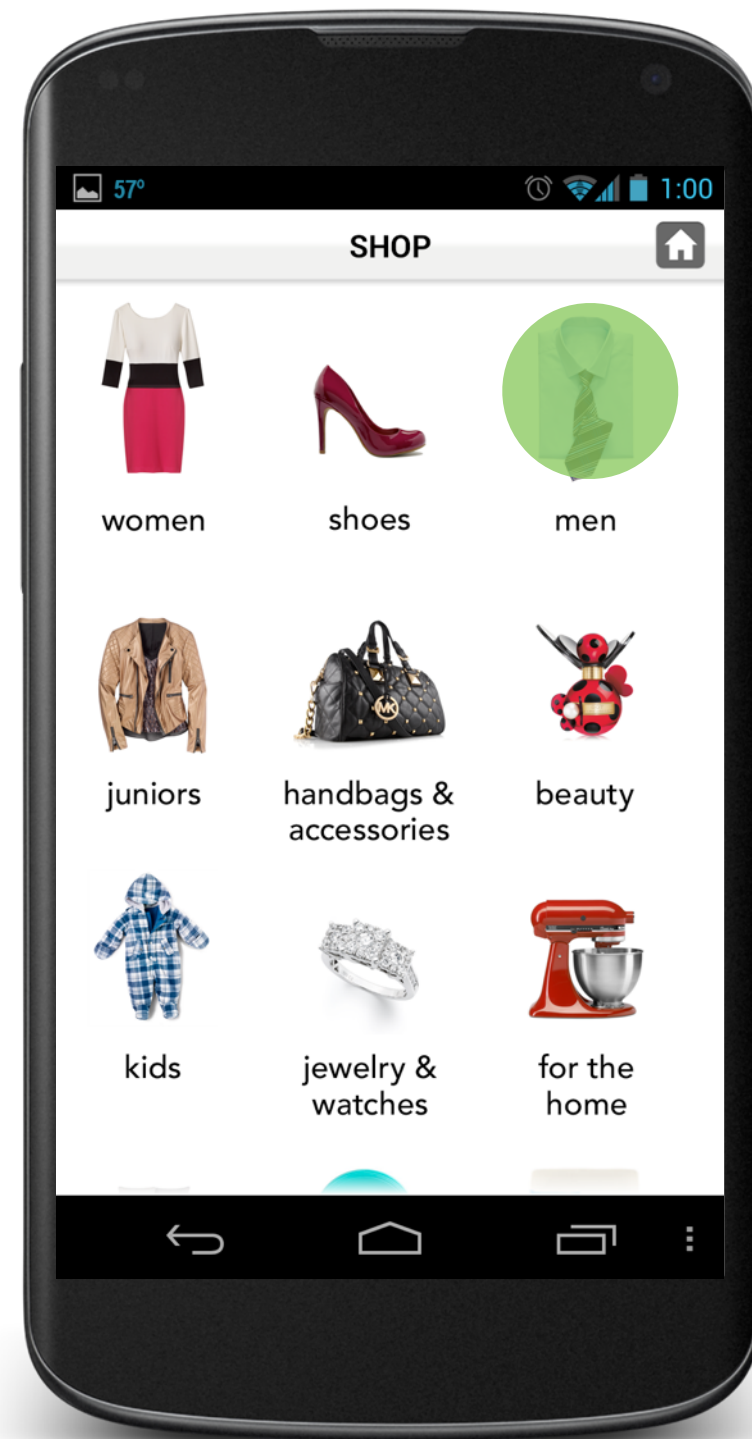
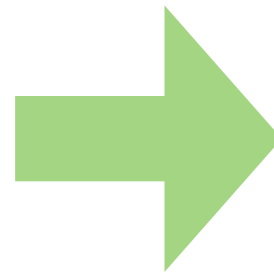


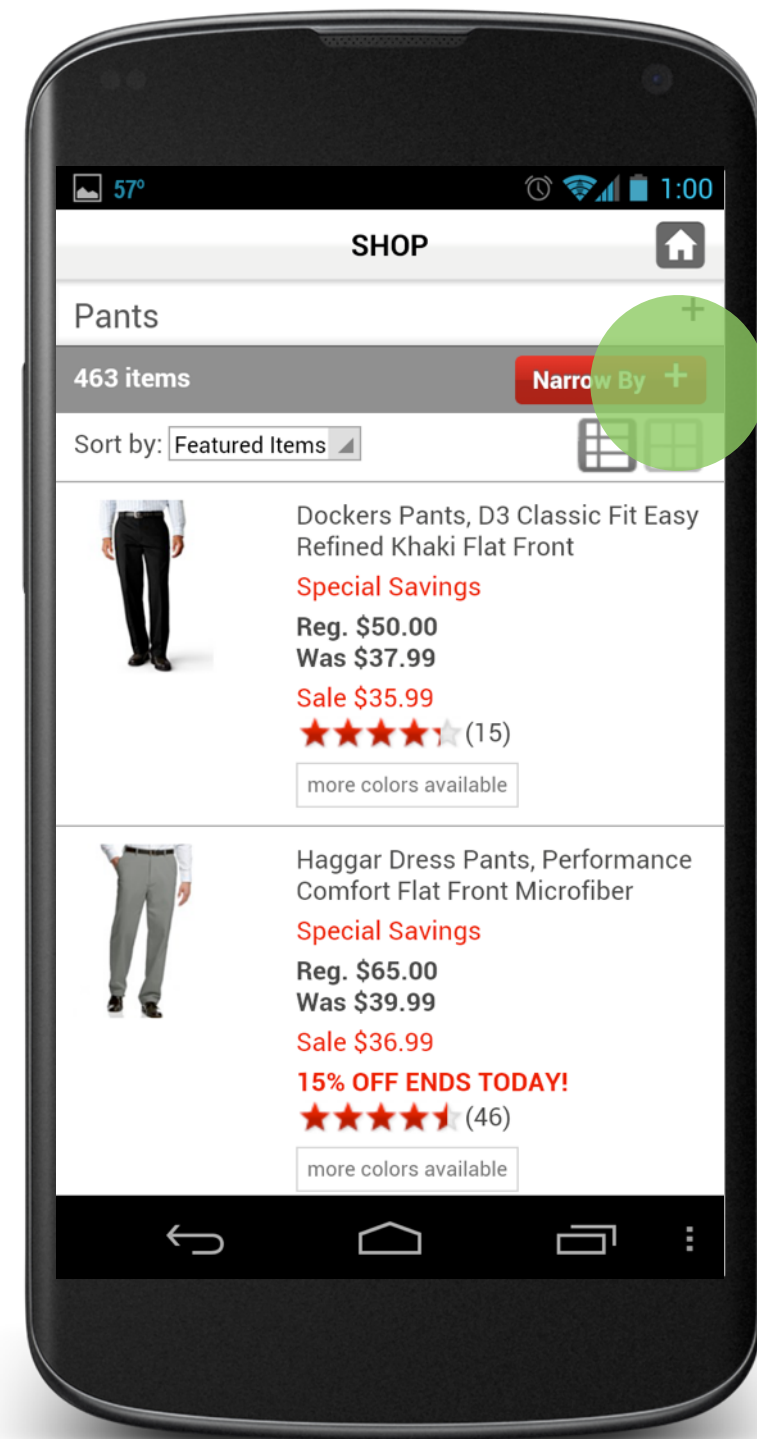
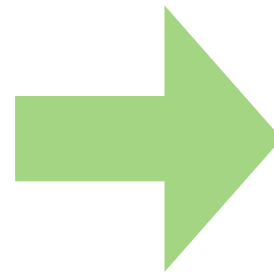
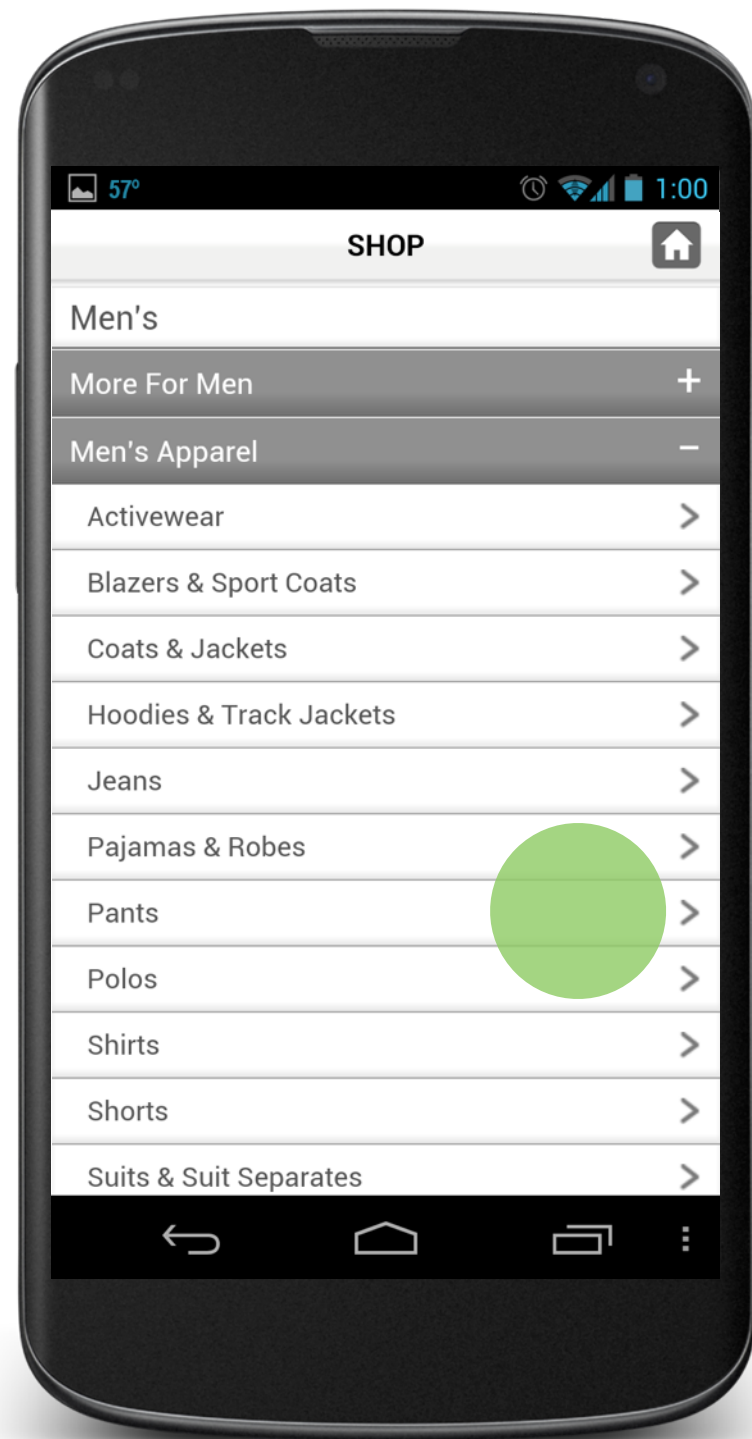


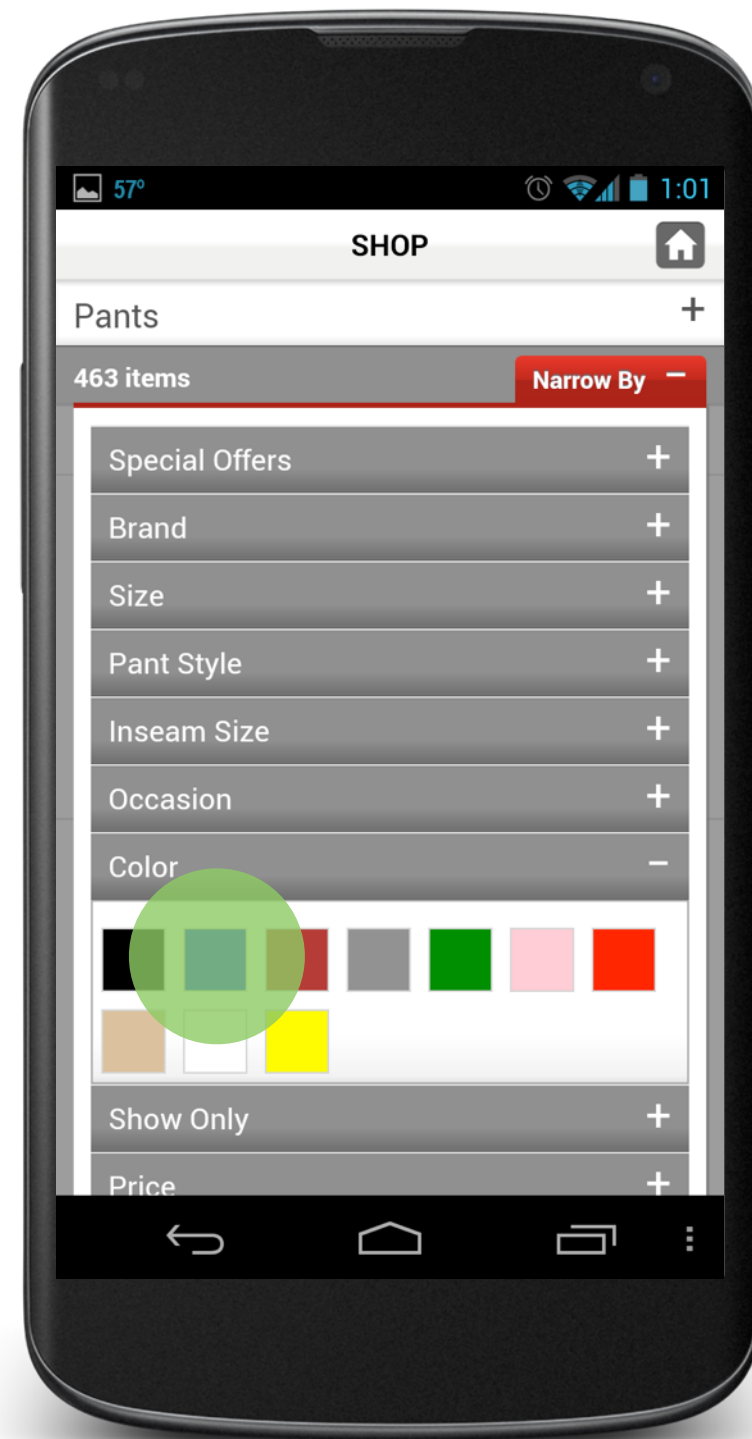
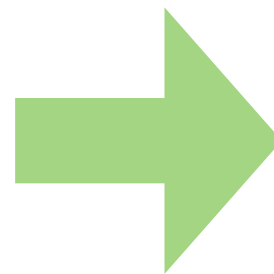
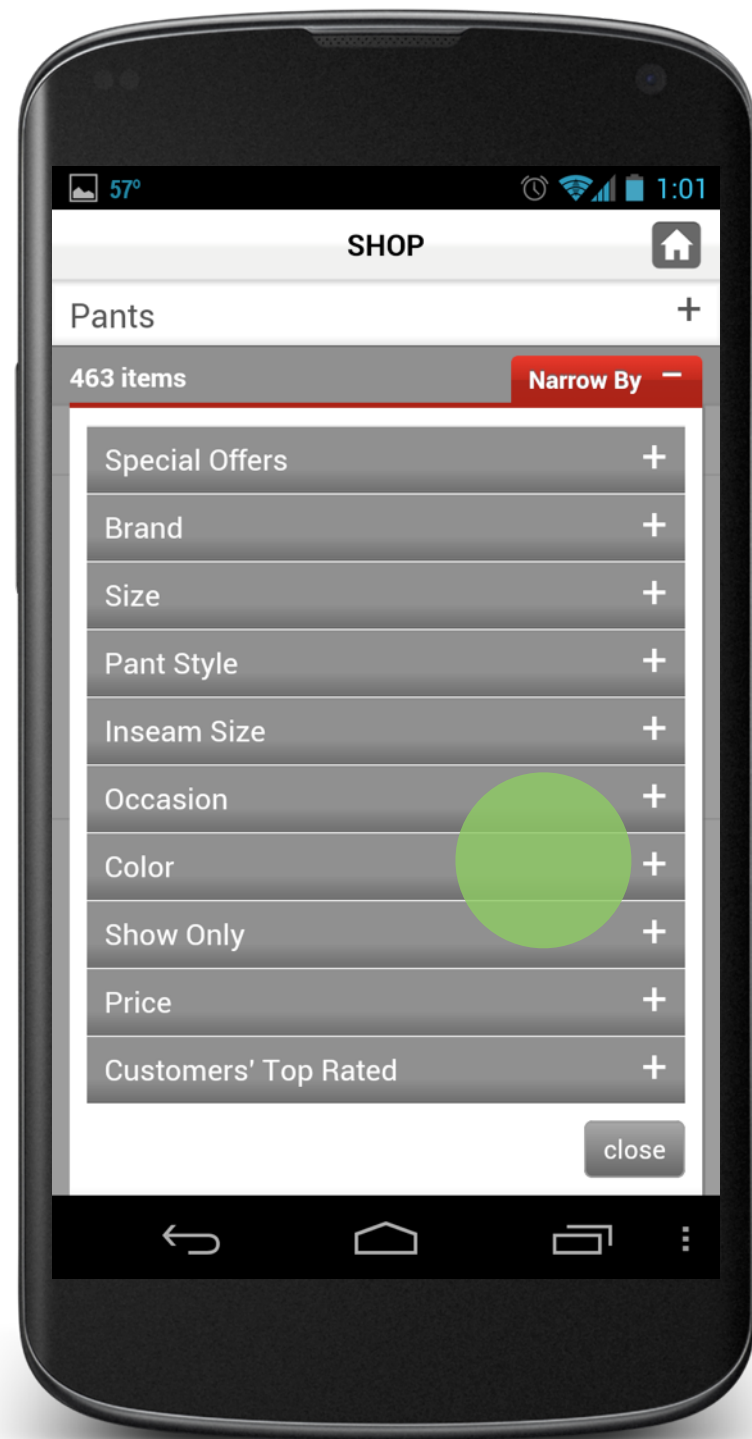


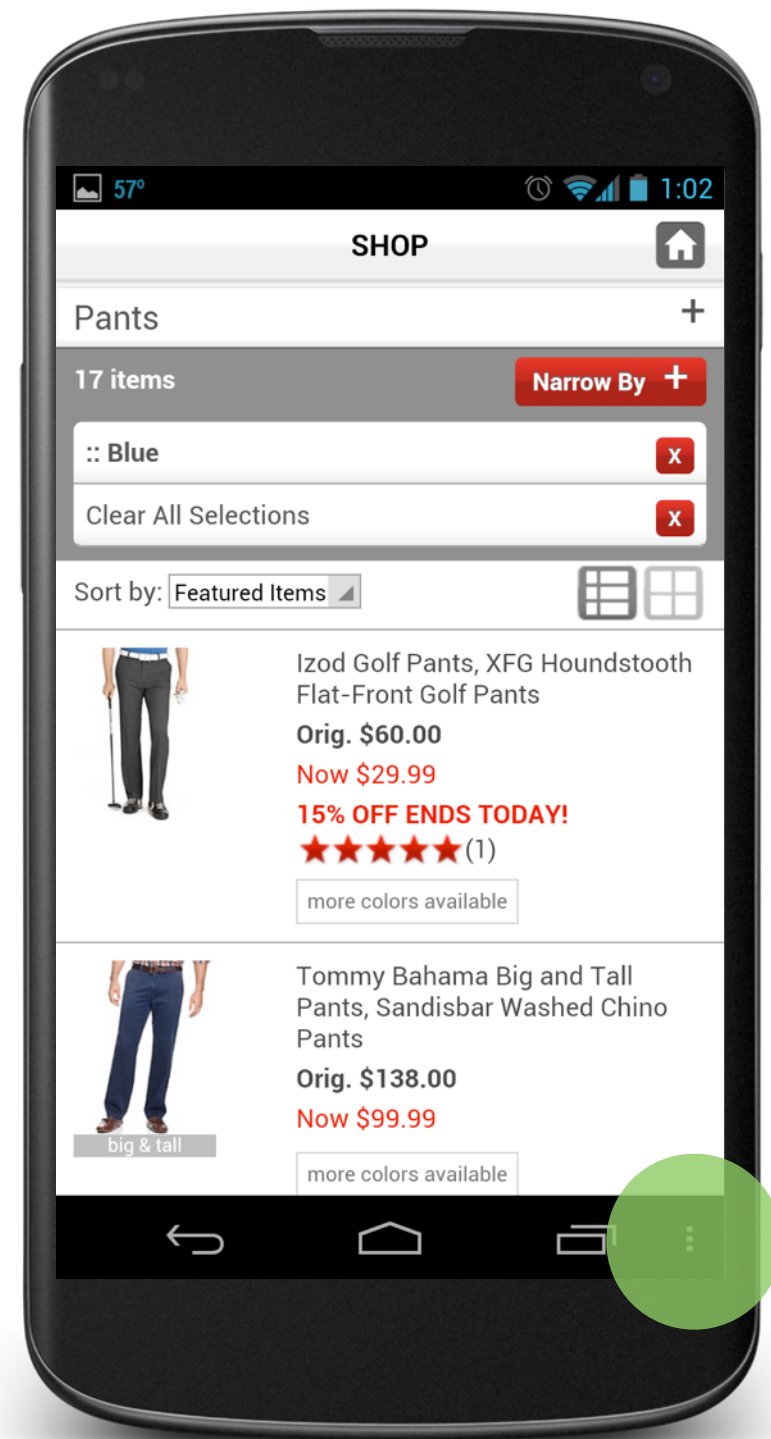
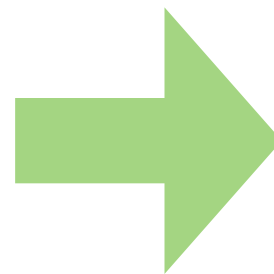
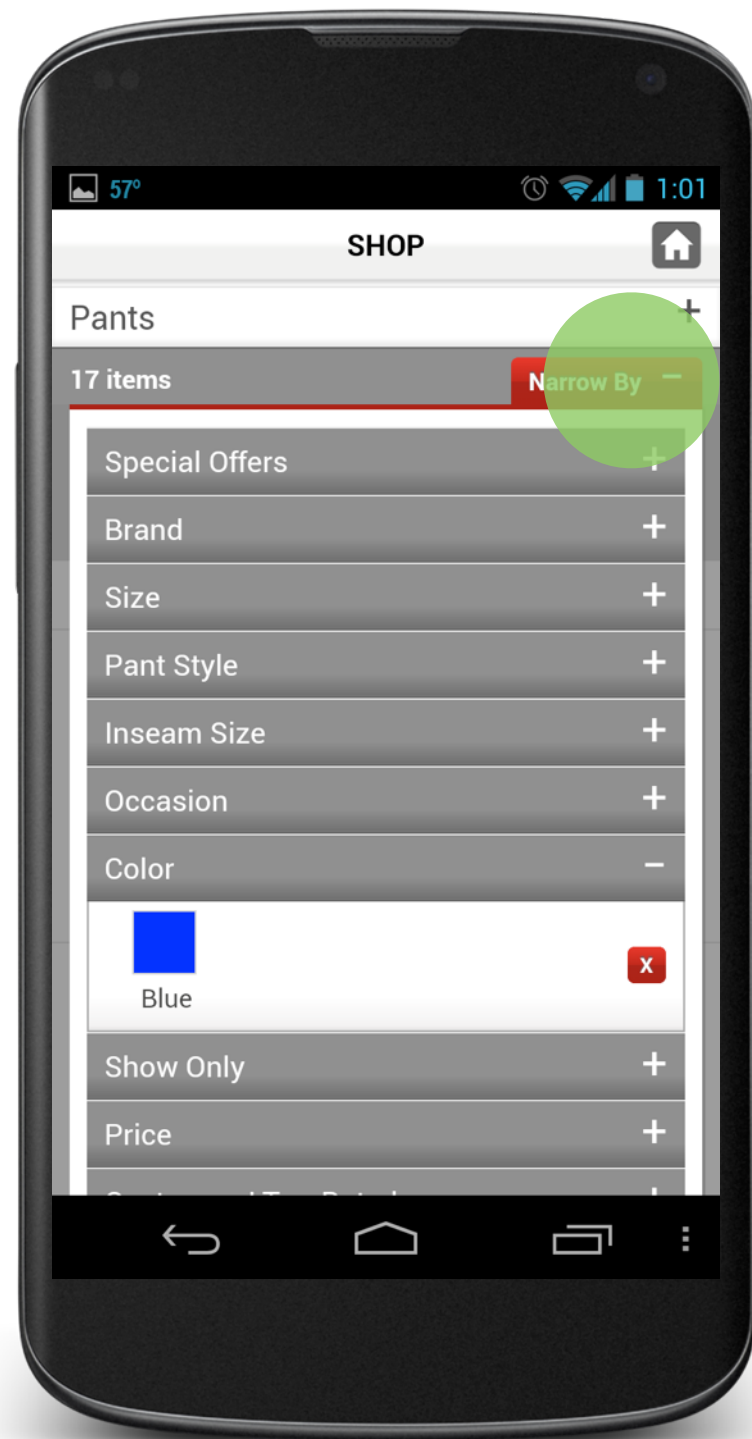




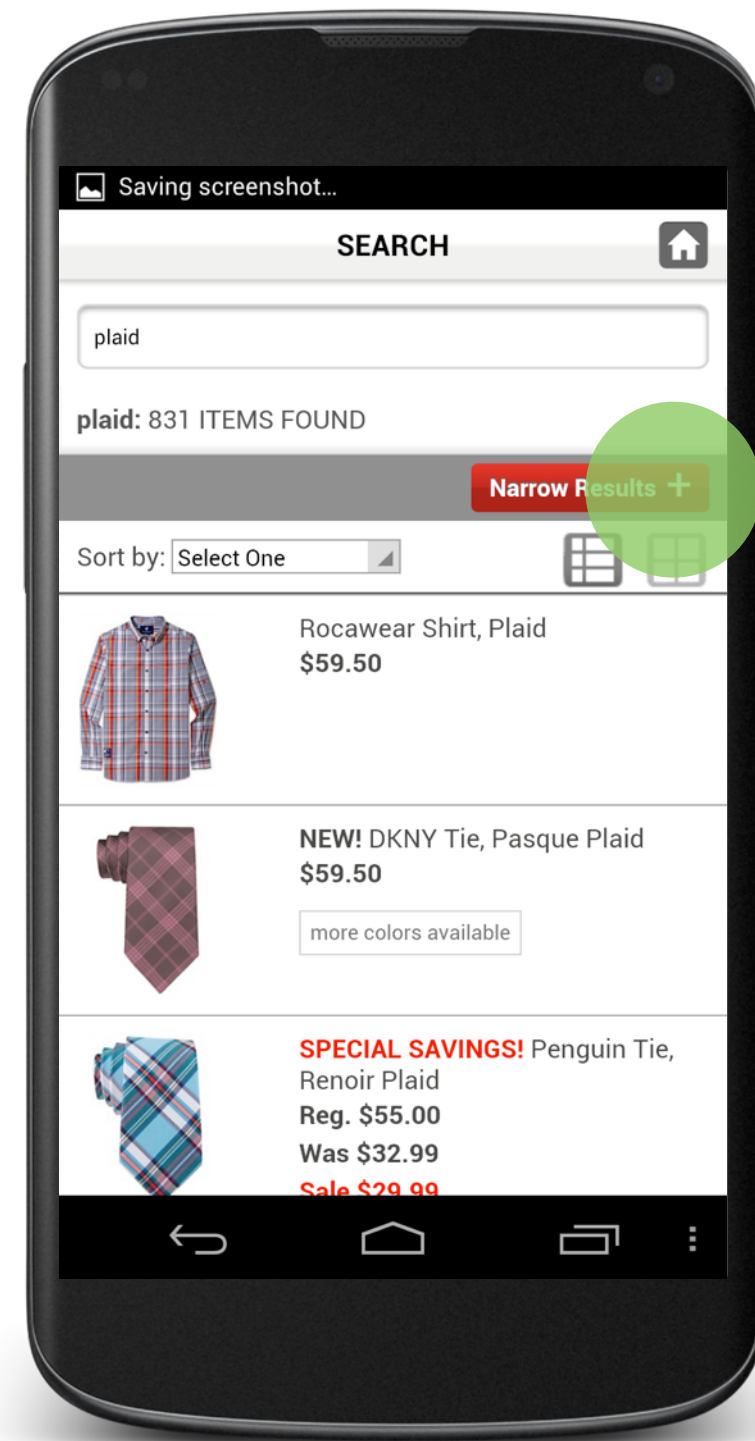
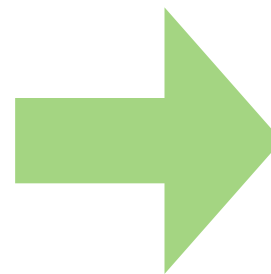
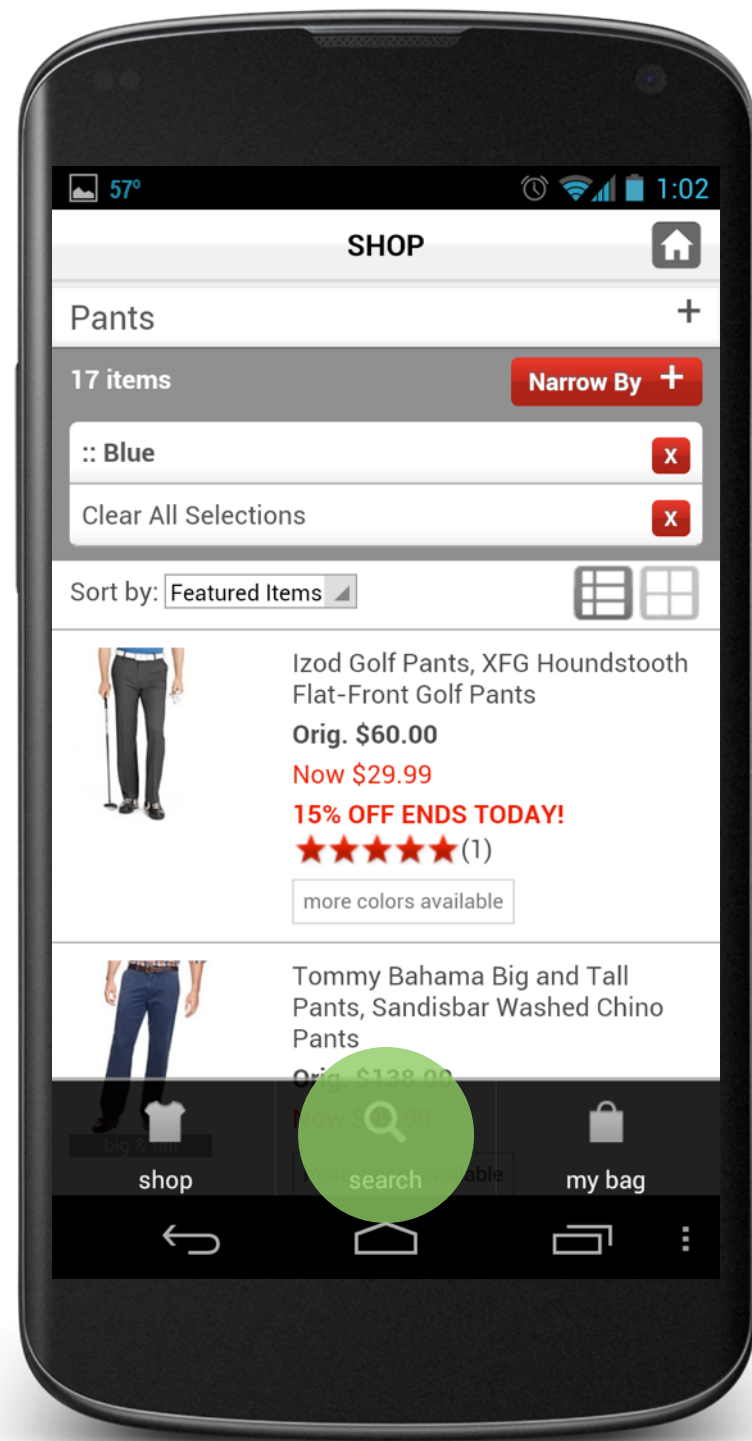


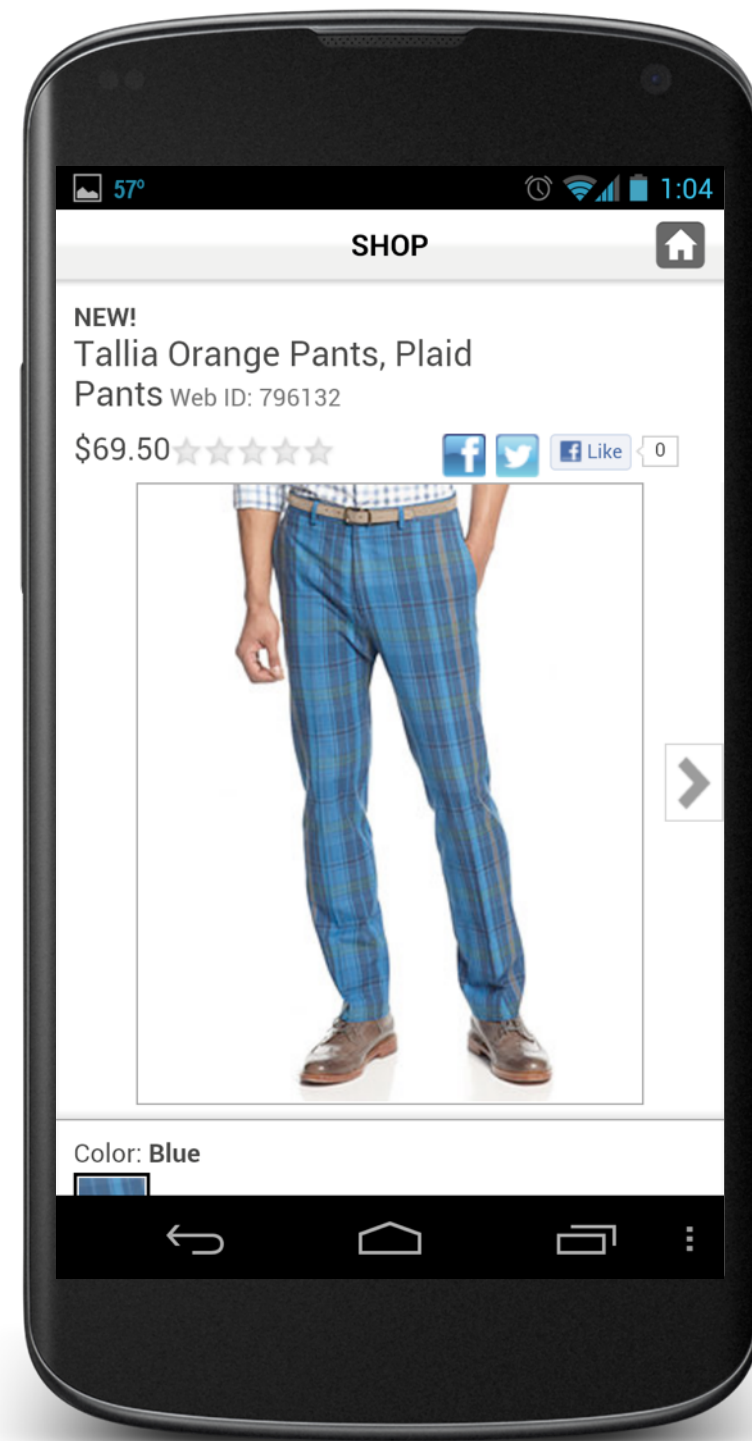
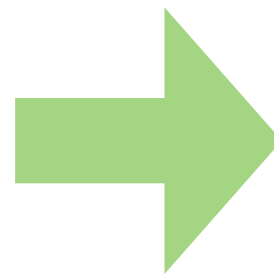
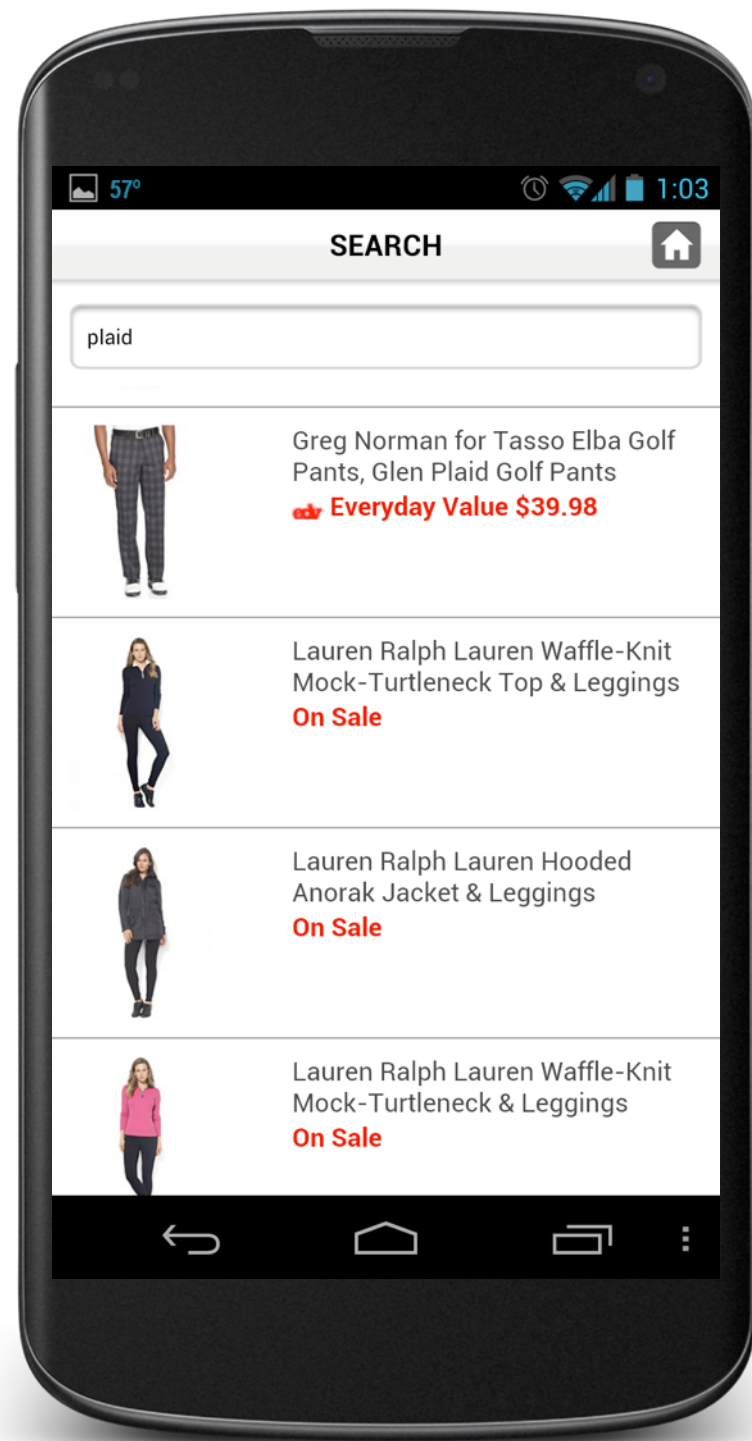


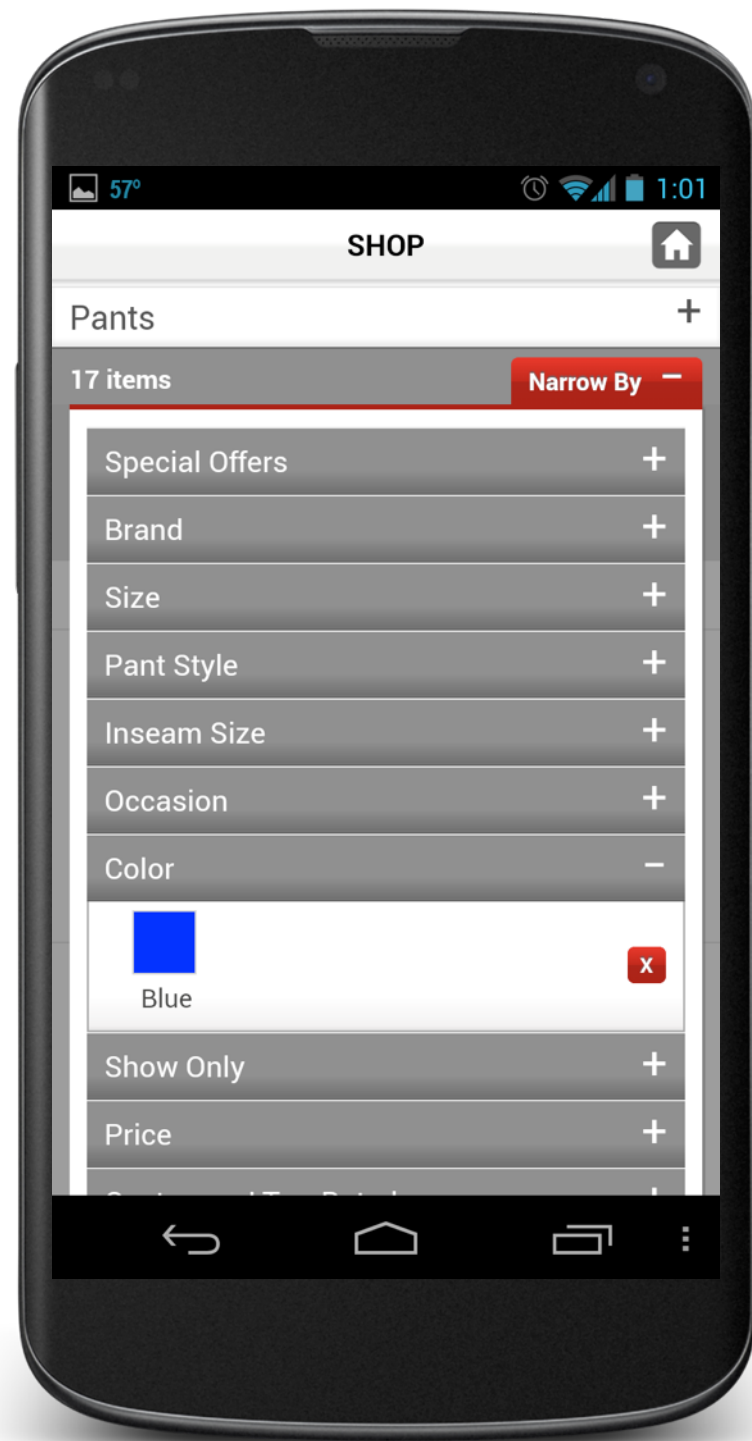




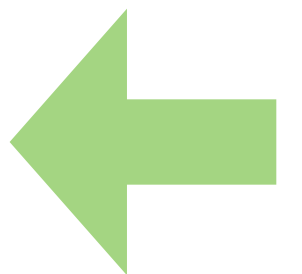
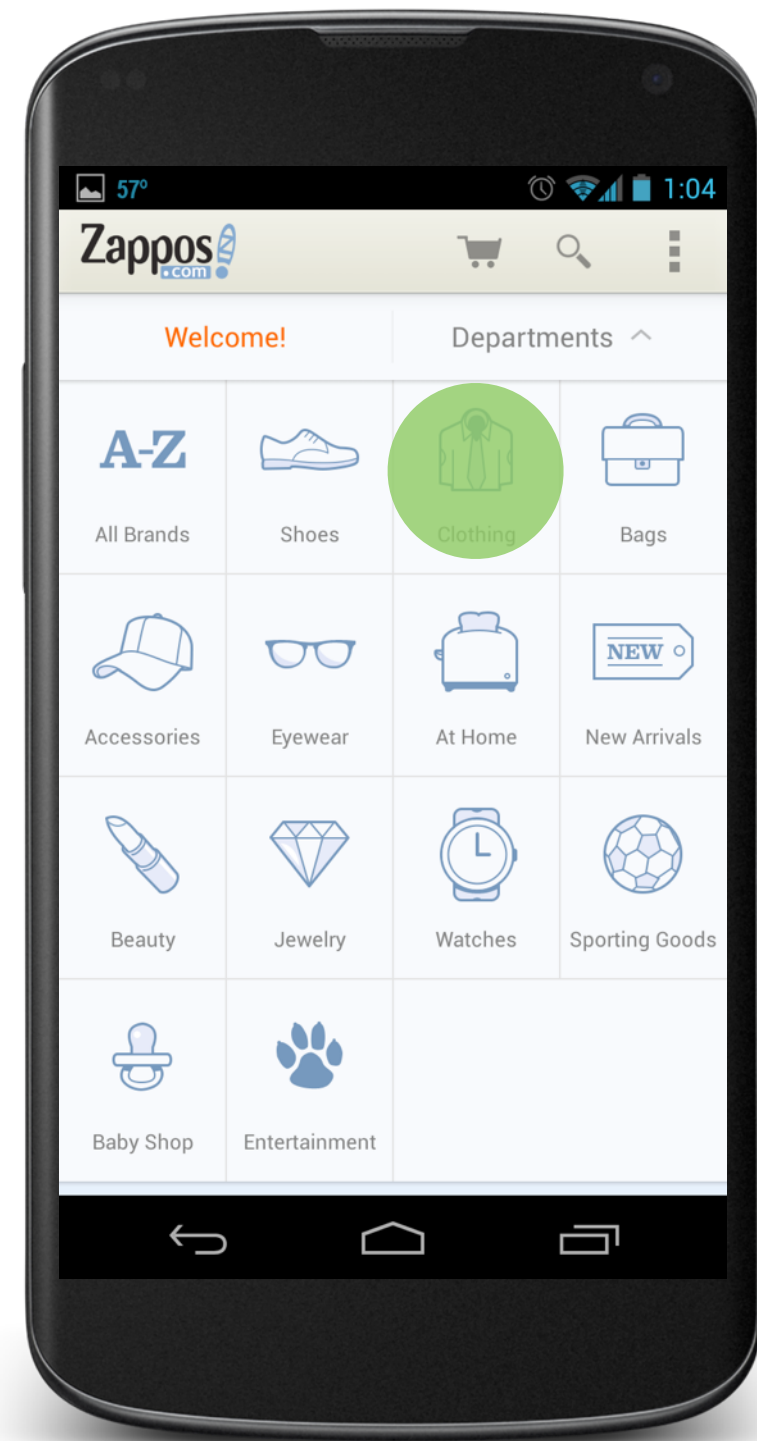
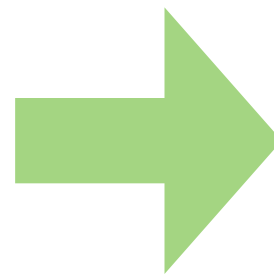




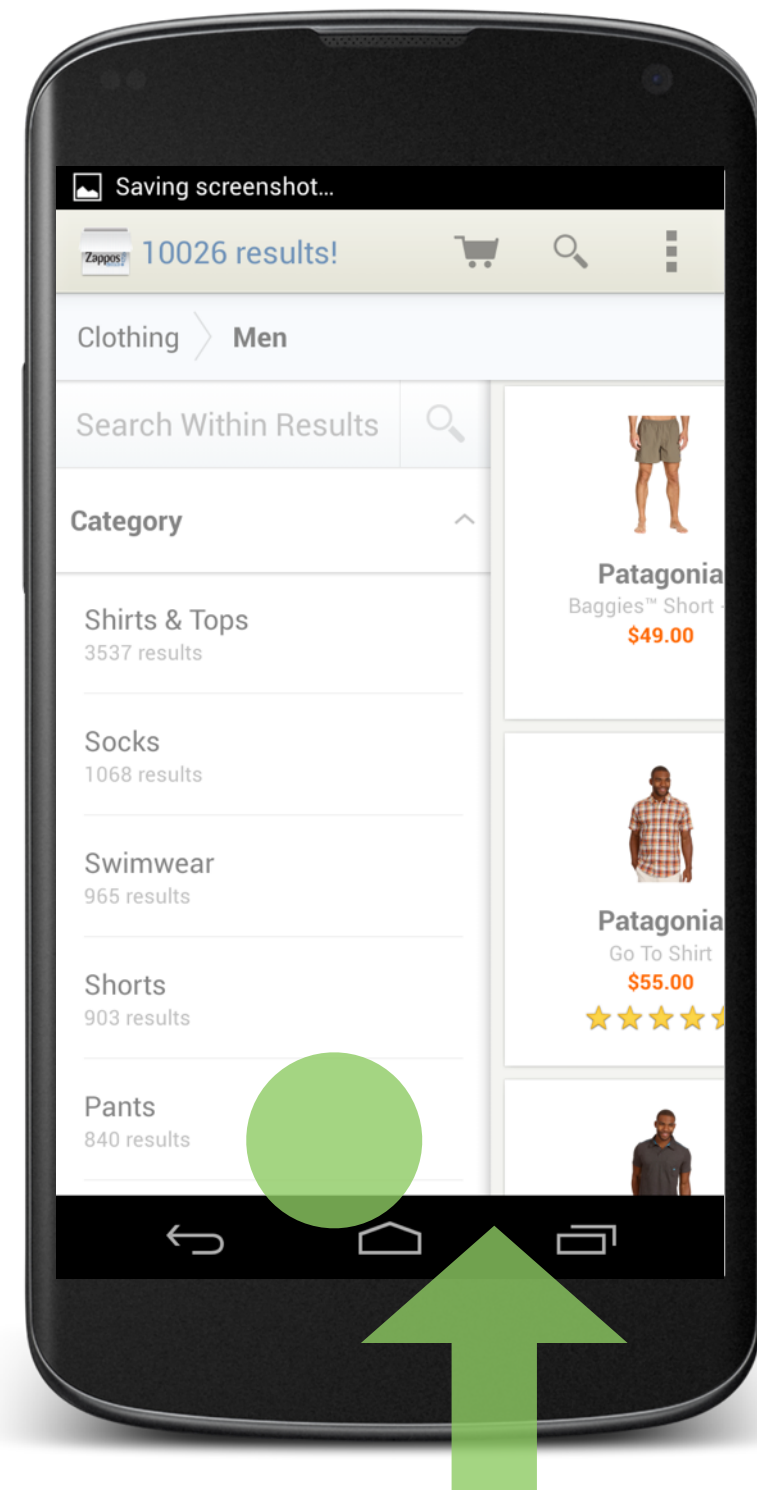
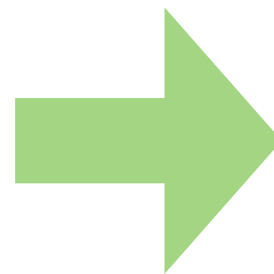
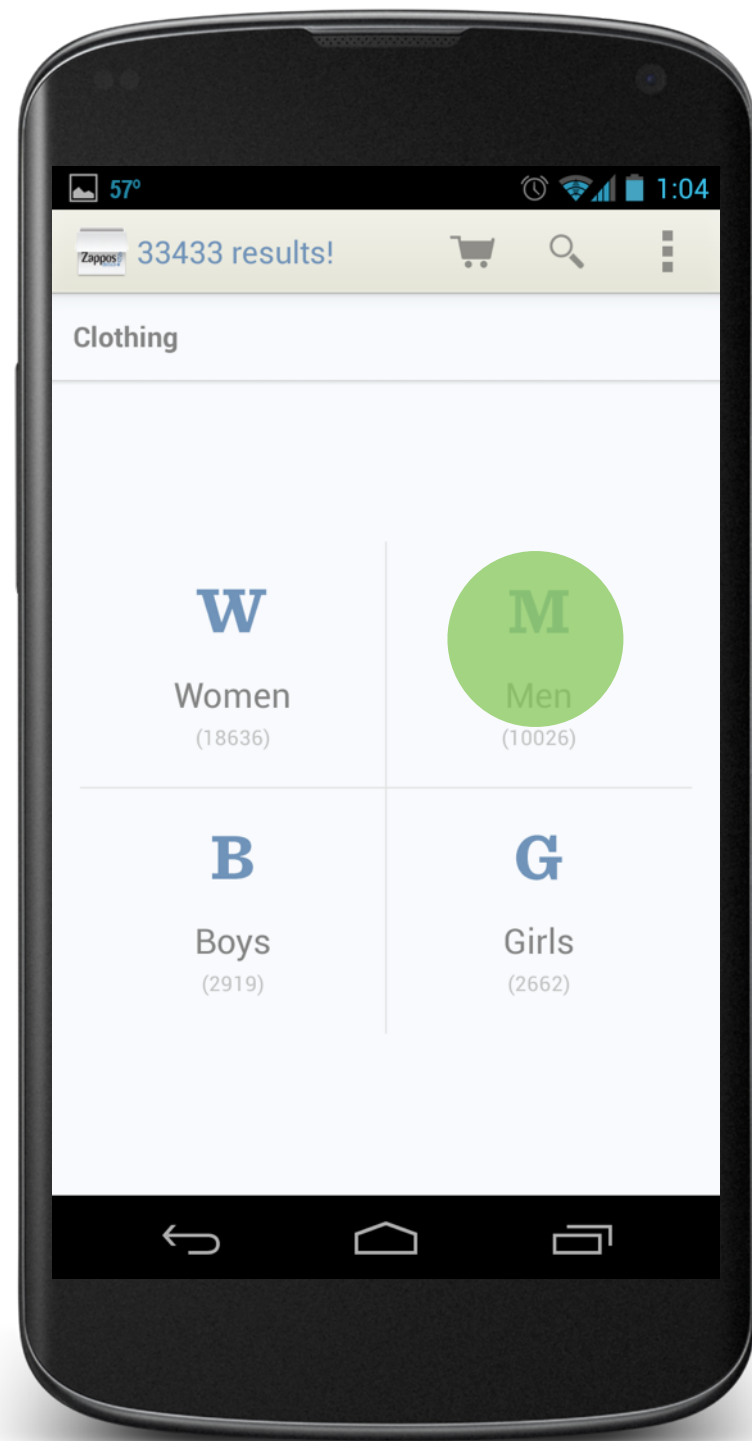


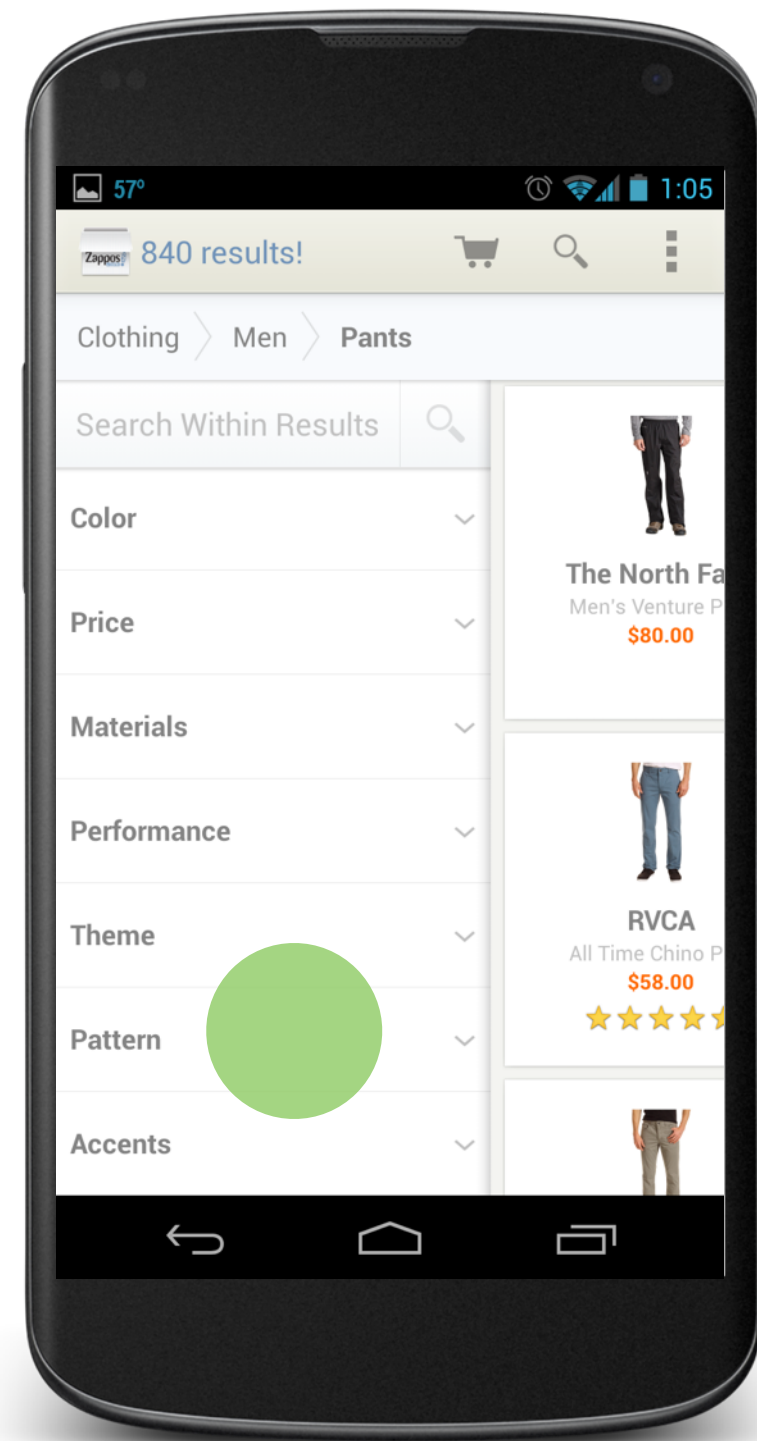
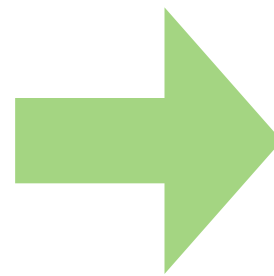
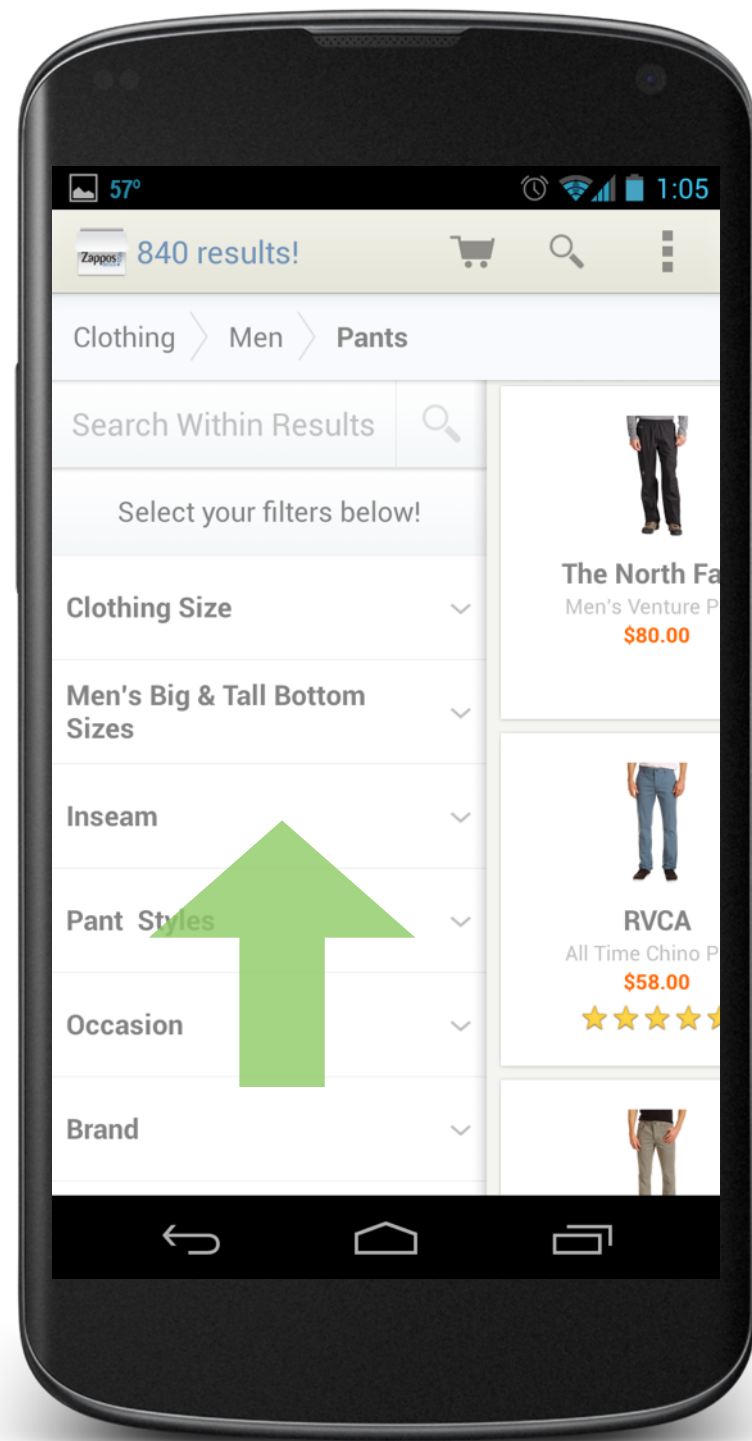


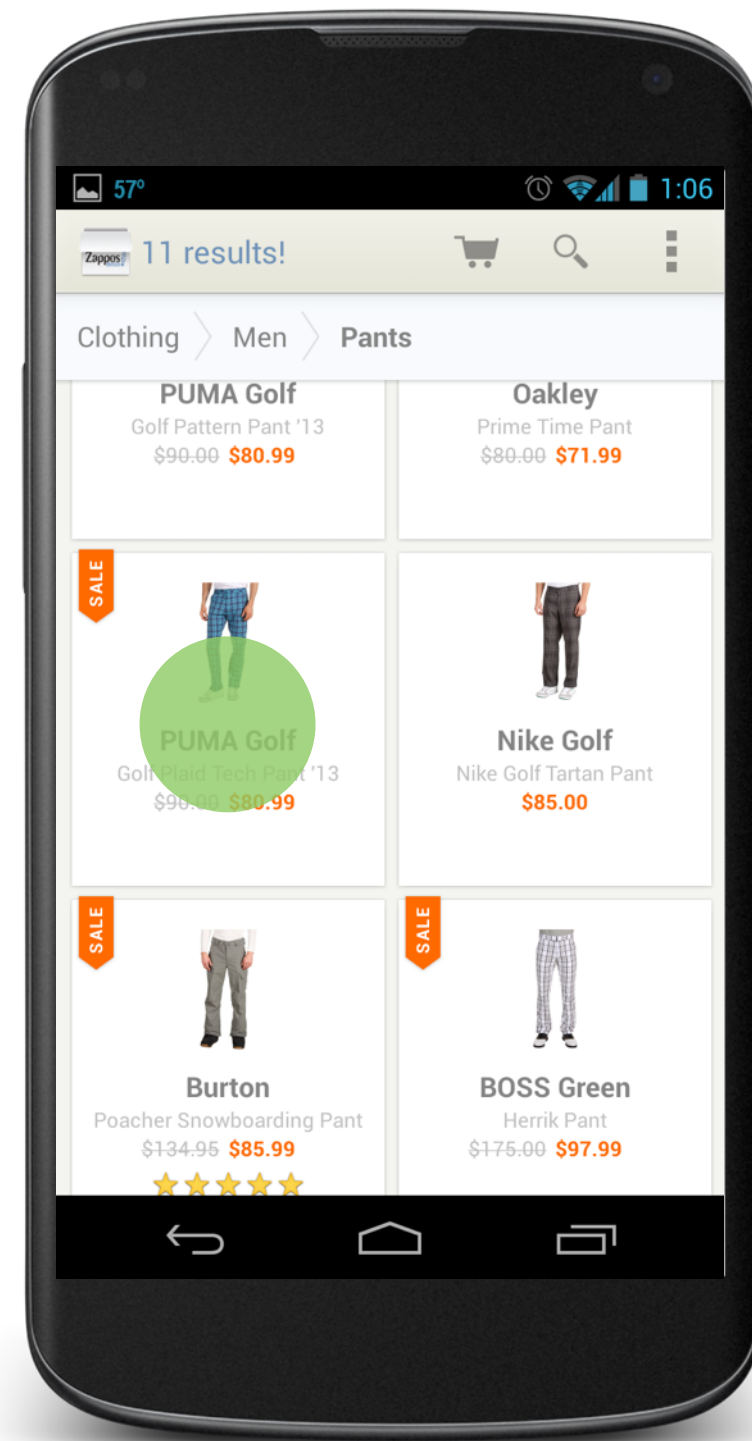
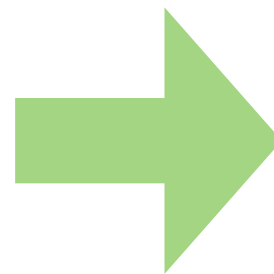
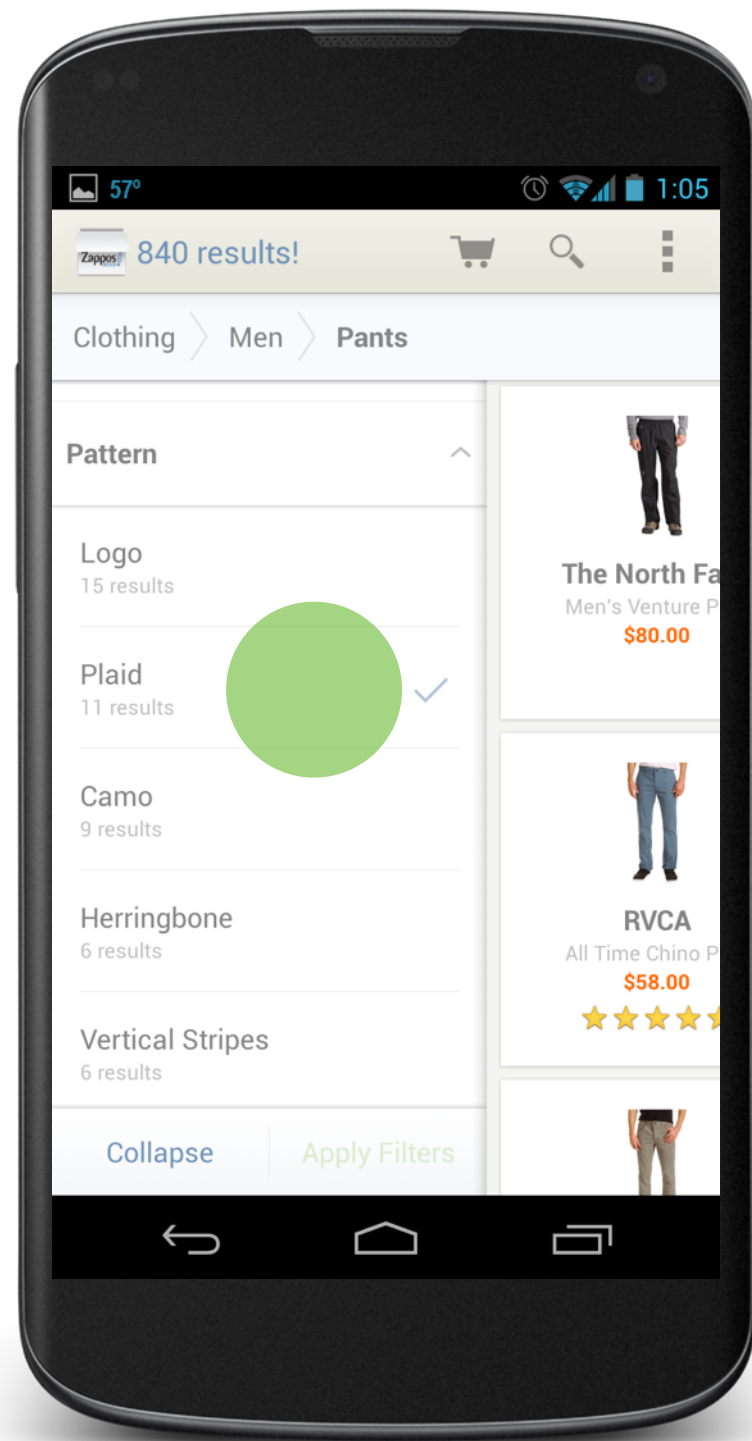
50%















- Huge navigation targets
- Metaphors grounded in the physical world
- Embodied patterns

“The human sense of presence, of being at a certain place in space, is fully determined by our ability to enter into closed-loop interactions ”

- Andy Clark.  
*Supersizing the Mind*

Mapping navigation.

# Mapping Navigation

- Your composite taxonomy
- Brief brief
- Device cards
- Easel paper
- UI guidelines



# Mapping Navigation

25 minutes

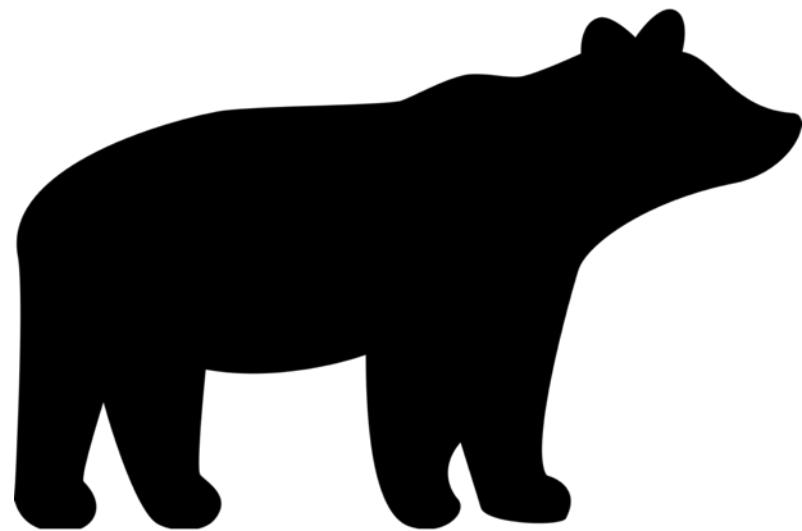
- Identify UI opportunities & limitations
- Formulate a design concept
- Map taxonomy to device
  - use native UI patterns when appropriate
  - account for transitions and place
  - define view-level structure
- Adjust composite taxonomy as necessary

# Mapping Navigation

10 minutes

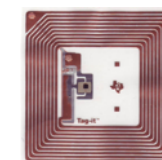
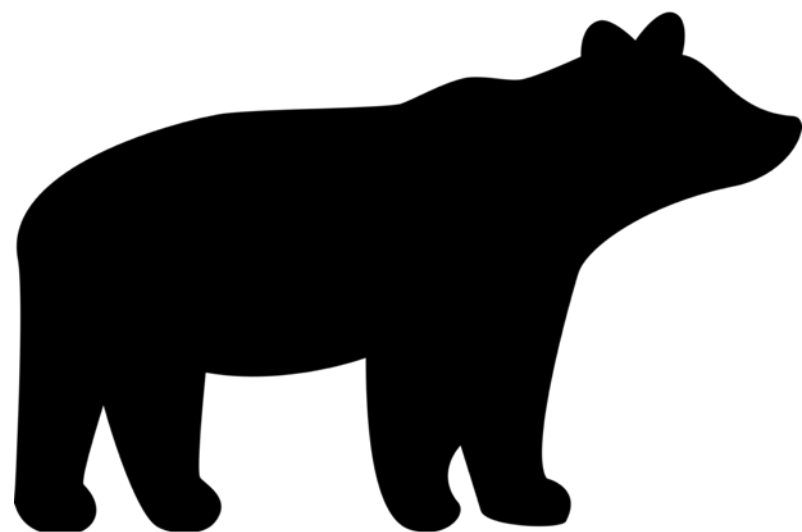
- What is your interaction design concept for each device?
- What opportunities did the device context lend?
- What constraints had to be accommodated?

Beyond textuality.



<http://jenson.org/of-bears-bats-and-bees-making-sense-of-the-internet-of-things/>





<http://jenson.org/of-bears-bats-and-bees-making-sense-of-the-internet-of-things/>



“You can only understand something relative to something you already understand.”

- Richard Saul Wurman. *Hats*

# Modes of Signification

## Symbolic

the signifier does not resemble the signified; it is arbitrary and conventional





Text





(signified)



= Tree

(signifier)



# Modes of Signification

## Symbolic

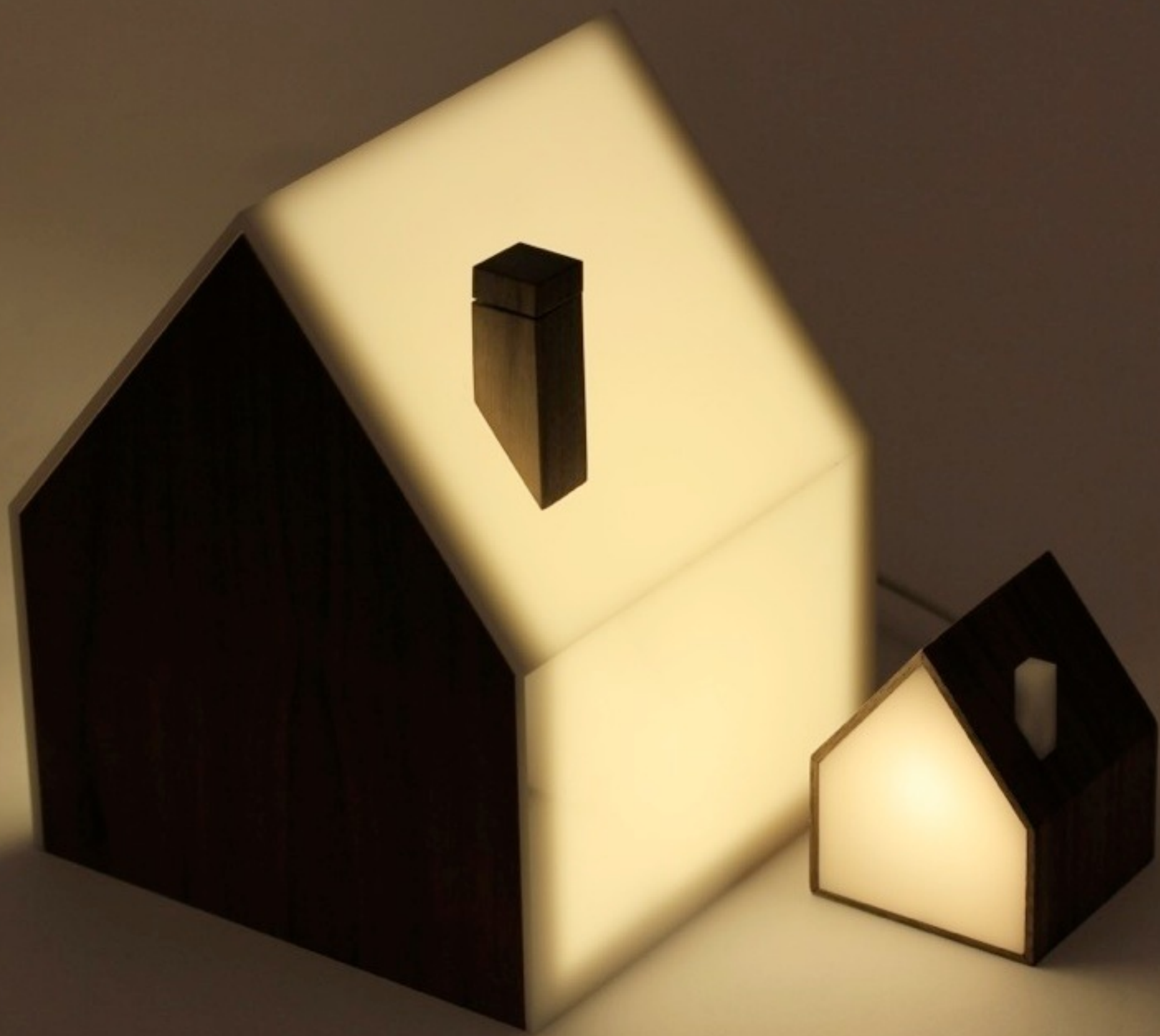
the signifier does not represent the signified; it is arbitrary and conventional

## Indexical

the signifier is directly connected to the signified

- Smoke signifies fire
- Fever signifies infection
- A knock signifies a visitor
- Handwriting signifies the writer





# Modes of Signification

## Symbolic

the signifier does not represent the signified; it is arbitrary and conventional

## Indexical

the signifier is directly connected to the signified

## Iconic

the signifier is perceived as resembling or imitating the signified

“Iconic signifiers seem to present reality more directly than symbolic signs.”

- Daniel Chandler. *Semiotics*













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“This innate bias may not be for faces as such,  
but for the particular kind of geometric  
configuration that faces present.”

- Louise Barrett. *Beyond the Brain*





“The best we can all do is focus our limited stock of human care and attention toward **designing systems** [...] not obsessing over individual pages for individual platforms.”

- Sara Wachter-Boettcher.  
*Content Everywhere*

# Responsive Information Architecture

An information design strategy that allows for the expression of **specific meaning** across multiple and independent **contexts**.

# Responsive Information Architecture

- Rich understanding of the information ecology
- Content-driven guidelines for interaction design choices
- Embrace ambiguity as a strategy for negotiating the connected environment
- Articulated information structures based on multiple modes of meaning making



Interface futures.

# Interface Futures

Imagine a future interface for:

- a watch
- a connected refrigerator
- a TV
- a car
- a connected home
- augmented reality (like Glass, but ready for prime time)

# Interface Futures

20 minutes

- Imagine UI opportunities & limitations
- Formulate a design concept
- Map your taxonomy to the device
  - how will you leverage multiple modes?
  - how will the device interact with connected environments?
  - what UI patterns are likely?
- Adjust the composite taxonomy as necessary

# Interface Futures

10 minutes

- What future interface did you choose?
- What are its opportunities and limitations?
- What is your interaction design concept?
- How did you map your taxonomy?
  - what changed?
  - what remained the same?



Wrapping up.

# **Taxonomy**

A method of arrangement conceived to create a particular kind of understanding.

# Building Flexible Taxonomies

1. Gather **concepts** & **candidate terms** from content audits, stakeholder interviews, and other research.
2. Determine the **narrative**
3. Identify and build out **single dimensions**
4. Articulate **compound taxonomies** to meet project goals
5. Present top-level **"straw-man"** taxonomy to stakeholders
6. Fully build out the revised taxonomy to **lower levels**
7. **Implement**, conduct **user testing** & **revise** as needed

# Mapping Navigation

1. Review device specific **opportunities** & **constraints**
2. Draft an **interaction design concept** based on your taxonomic narrative
3. **Articulate** organizational structures to wayfinding elements
  - use native UI patterns when appropriate
  - account for transitions and place
  - define view-level structure
4. Flex taxonomy across individual **dimensions** as necessary



# Responsive Information Architecture

- Rich understanding of the information ecology
- Content-driven guidelines for interaction design choices
- Embrace ambiguity as a strategy for negotiating the connected environment
- Articulated information structures based on multiple modes of meaning making

# Books

**Card Sorting: Designing Usable Categories.** Donna Spencer, Rosenfeld Media 2009

**The Accidental Taxonomist.** Heather Hedden. Information Today, Inc 2010

**Organising Knowledge: Taxonomies, Knowledge and Organizational Effectiveness.**  
Patrick Lambe, Chandos Publishing 2007

**Building Enterprise Taxonomies.** Darin Stewart, Mokita Press 2011

**Semiotics.** Daniel Chandler, Routledge 2007

**Supersizing the Mind.** Andy Clark, Oxford University Press 2011

**Beyond the Brain.** Louise Barrett, Princeton University Press 2011

**Content Everywhere.** Sara Wachter-Boettcher, Rosenfeld Media 2012

**Women, Fire, and Dangerous Things.** George Lakoff. University of Chicago Press 1987

# Online

**The Magical Short-Form Creative Brief.** Jared Spool, 2012

[http://www.uie.com/articles/short\\_form\\_creative\\_brief/](http://www.uie.com/articles/short_form_creative_brief/)

**The Nature of Information Architecture.** Dan Klyn, 2013

<http://wildlyappropriate.com/2013/04/06/poster-for-information-architecture-summit-2013/>

**Ambiguity as an emerging design pattern.** Luca Rosati, 2014

<http://pervasiveia.com/blog/embracing-ambiguity>

**Of Bears, Bats, and Bees: Making Sense of the Internet of Things.** Scott Jenson, 2012

<http://jenson.org/of-bears-bats-and-bees-making-sense-of-the-internet-of-things/>

**Hats.** *Design Quarterly* No. 145. Richard Saul Wurman, 1989

<http://www.jstor.org/stable/i386312>

**Information Architecture and the Connected Environment.** Andy Fitzgerald, 2014

<http://radar.oreilly.com/tag/ia-series>

# Thank you.

Taxonomy for App Makers

<http://www.slideshare.net/andybywire>

[www.andyfitzgerald.org](http://www.andyfitzgerald.org)

#AppTaxonomy

@andybywire