

Making Sense of the Technology Landscape

ENSE 805 with Tim Maciag



University
of Regina



**FACULTY OF ENGINEERING
& APPLIED SCIENCE**
Software Systems Engineering



Outline

- Technology and communities
- Fundamental challenges/*polarities*
- Technology & community dynamics
- Tool abundance in the digital workplace
- Mapping a community's technology configuration

Technology & community

- Importance of understanding community orientations first



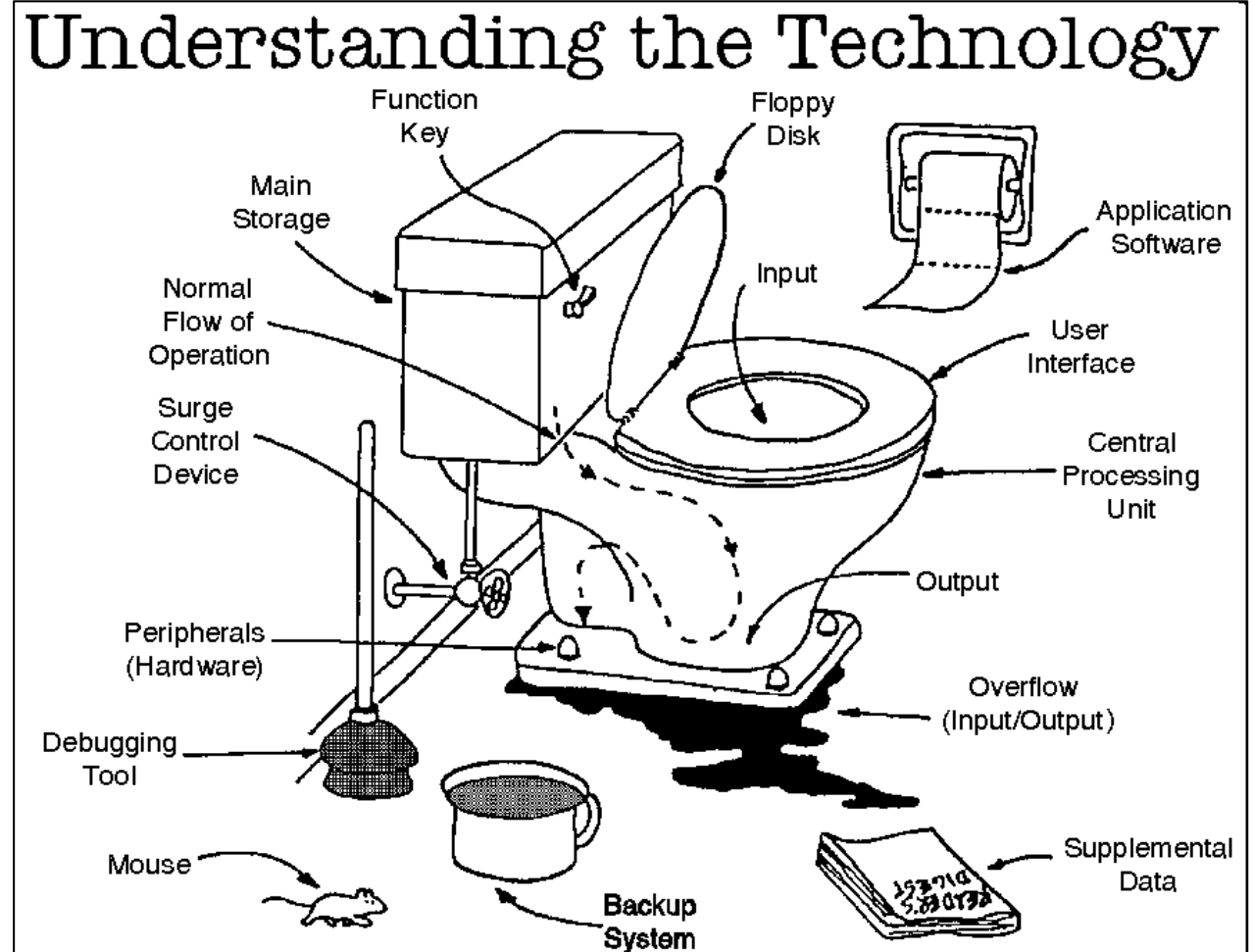
**Solving
Major
World
Problems**



**Understanding
Every
Meme**

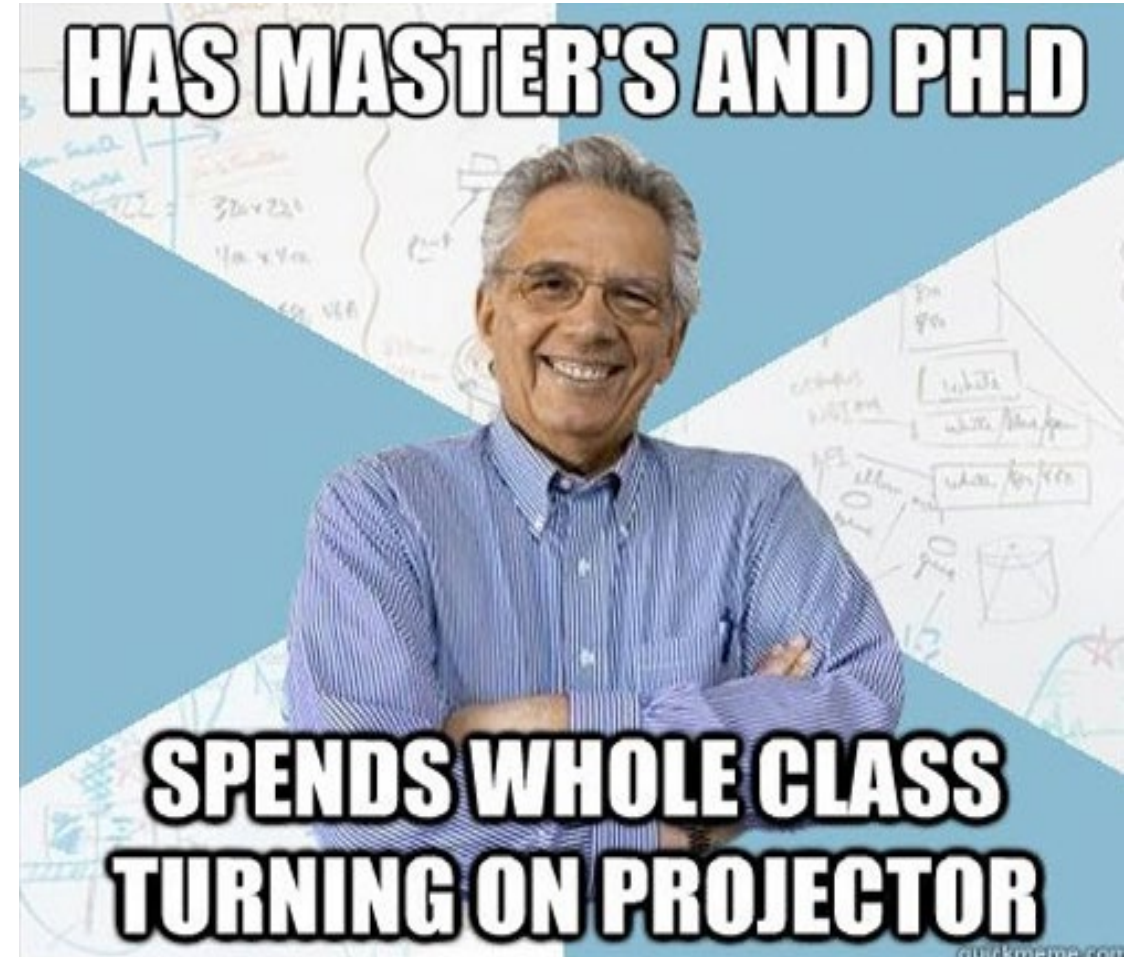
Technology & community

- Importance of understanding community orientations first
- Understanding a community by their use of technology



Technology & community

- Importance of understanding community orientations first
- Understanding a community by their use of technology
- Fundamental challenges



Rhythms

- Togetherness



Rhythms

- Togetherness
- Separation



Rhythms

- Togetherness
- Separation
- About togetherness & separation



Rhythms

- Togetherness
- Separation
- About togetherness & separation
- Appeal of technology



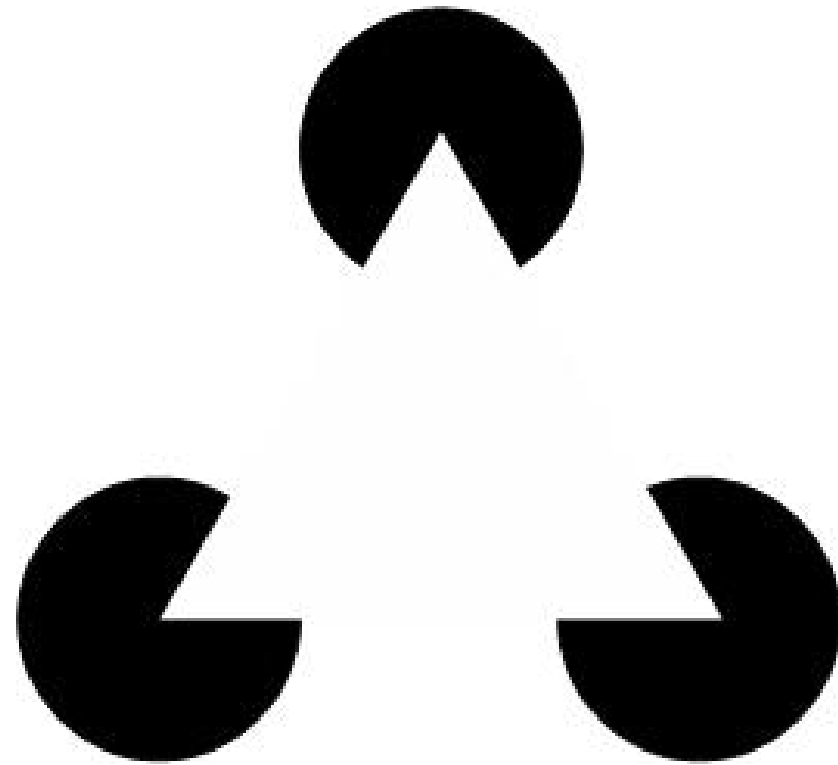
Interactions

- Participation



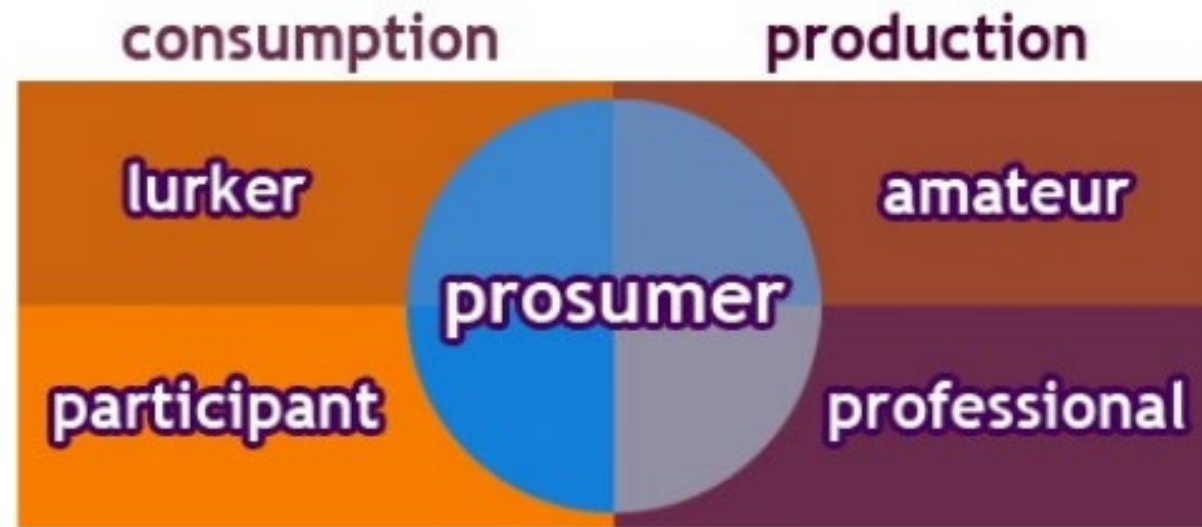
Interactions

- Participation
- Reification



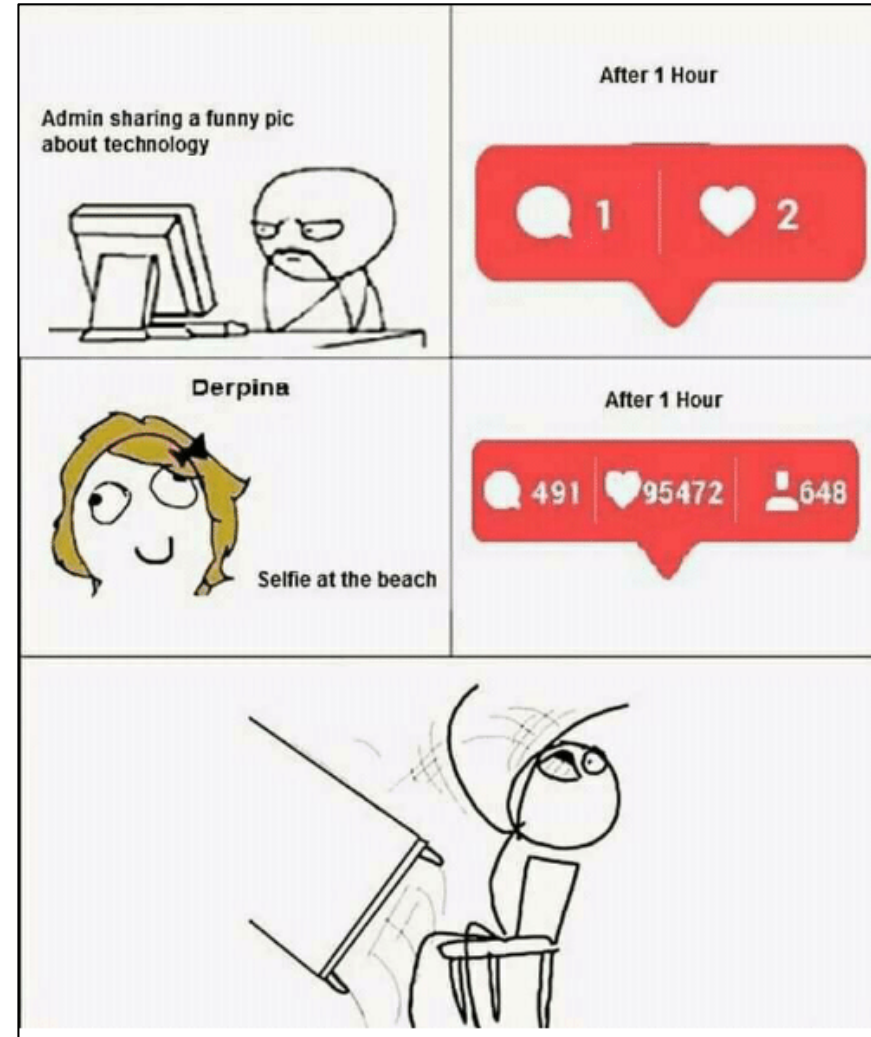
Interactions

- Participation
- Reification
- About participation & reification



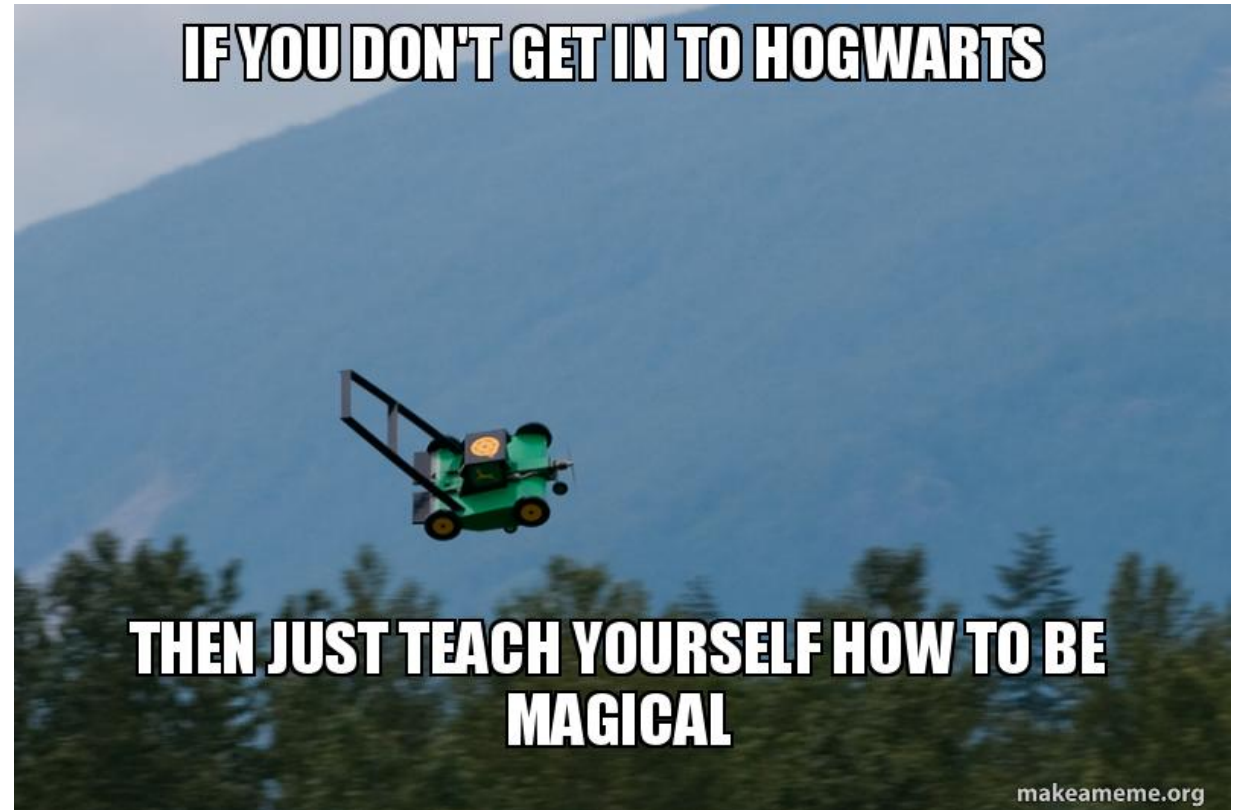
Interactions

- Participation
- Reification
- About participation & reification
- Appeal of technology



Identities

- Individuals



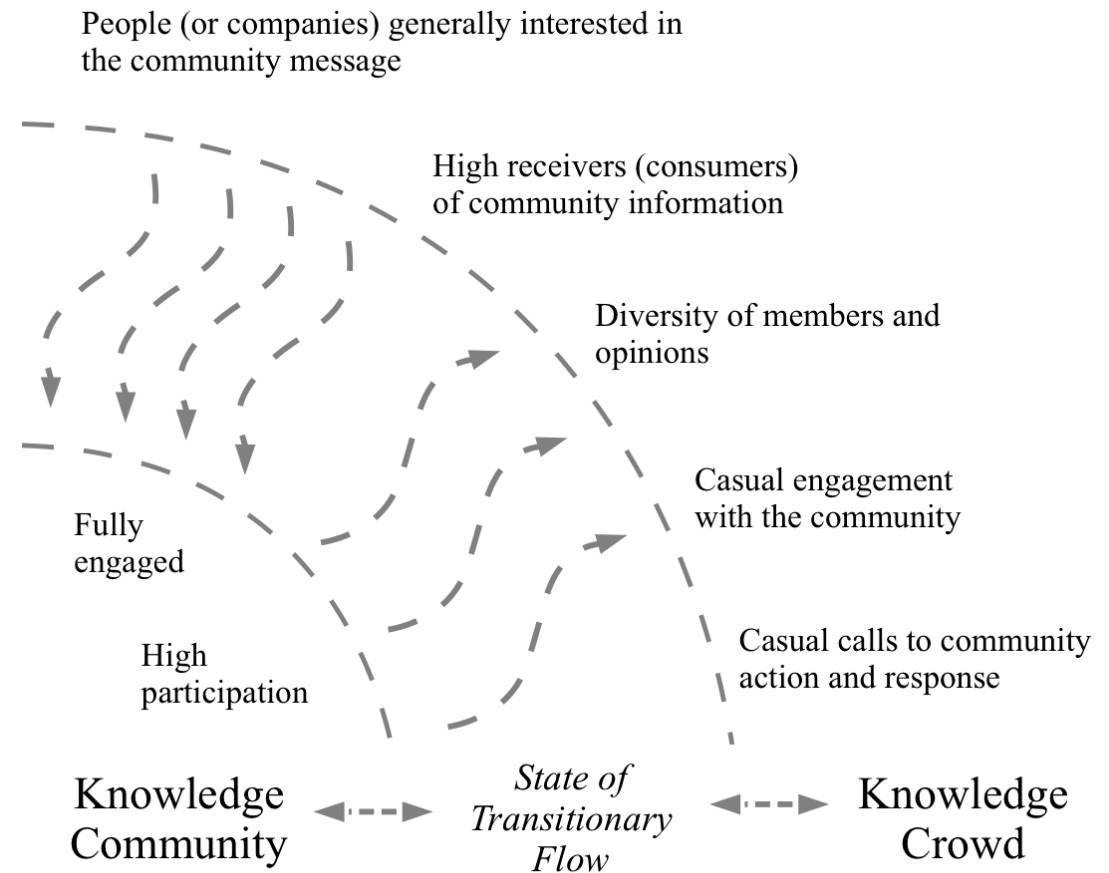
Identities

- Individuals
- Groups



Identities

- Individuals
- Groups
- About individuals and groups



Identities

- Individuals
- Groups
- About individuals and groups
- Eli Pariser: Beware Online Filter Bubbles



Identities

- Individuals
- Groups
- About individuals and groups
- Eli Pariser: Beware Online Filter Bubbles”
- Appeal of technology



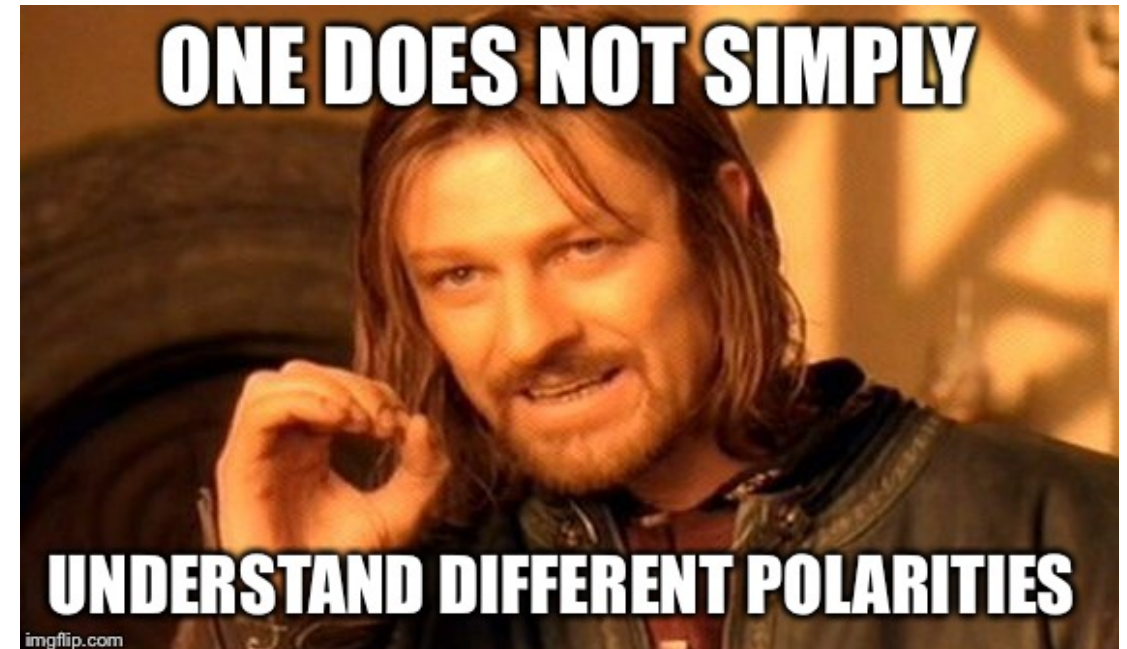
Summarization of the three polarities

- Key challenges that drive communities to adopt technology
 - Rhythms
 - Interactions
 - Identities



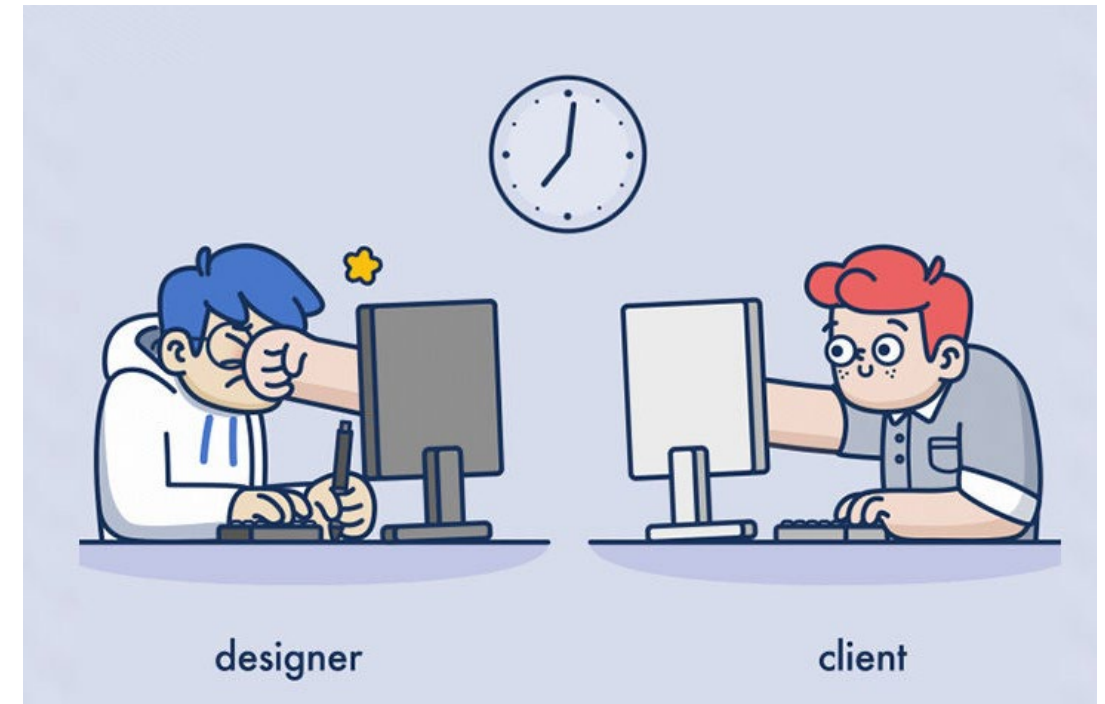
Summarization of the three polarities

- Key challenges that drive communities to adopt technology
 - Rhythms
 - Interactions
 - Identities
- Why they are referred to as “polarities”



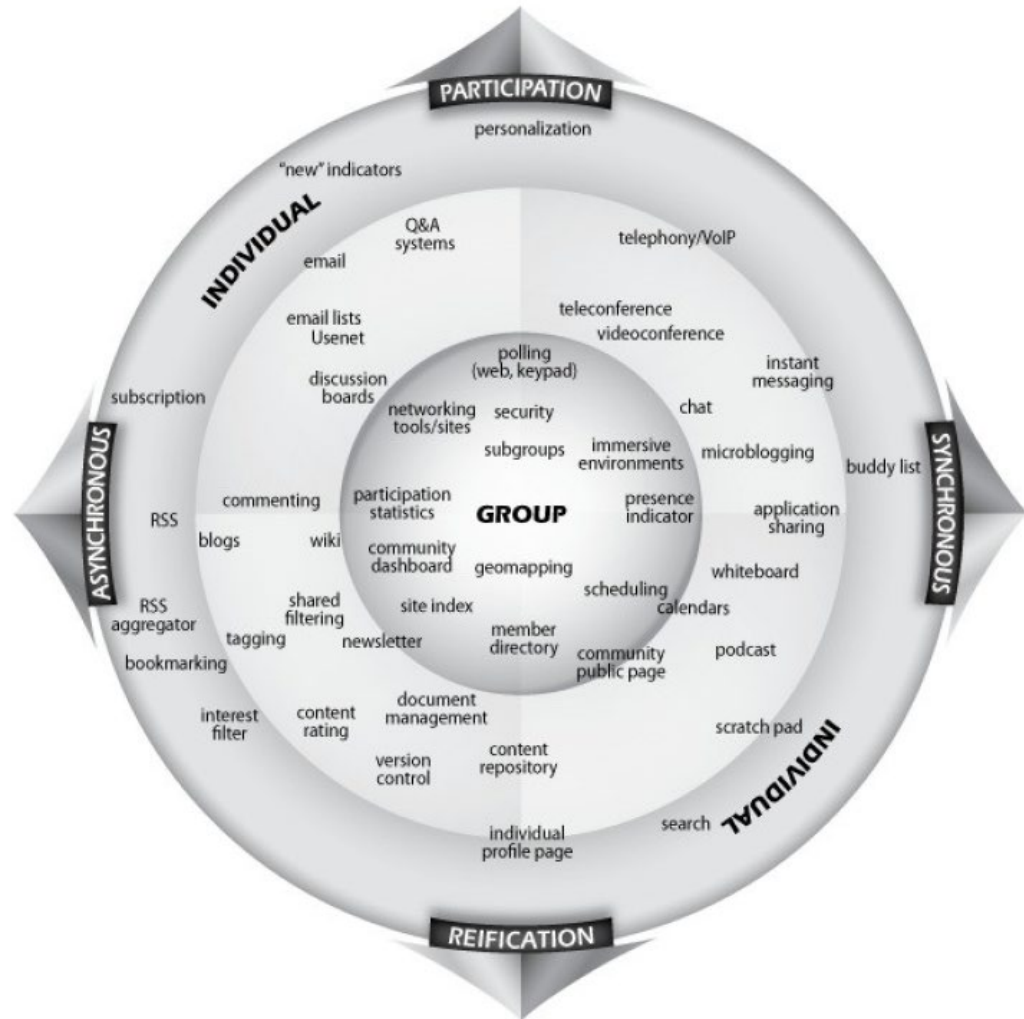
Summarization of the three polarities

- Key challenges that drive communities to adopt technology
 - Rhythms
 - Interactions
 - Identities
- Why they are referred to as “polarities”
- Shifting for inclusion and flexibility
 - Our job as designers can be complex as we are required to determine what’s “best”



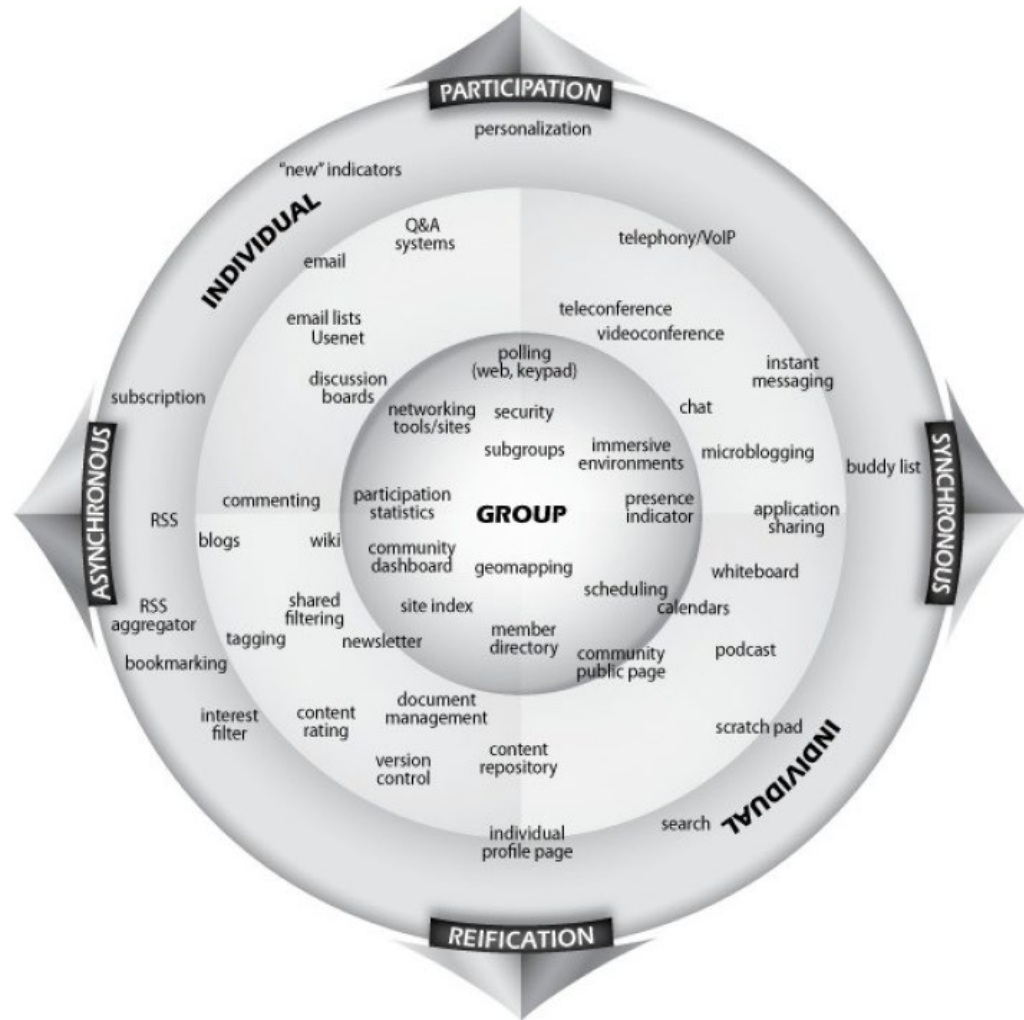
Snapshot of community tools

- Design dimensions/insights
 - Synchronous/asynchronous
 - Participation/reification
 - Individual/group



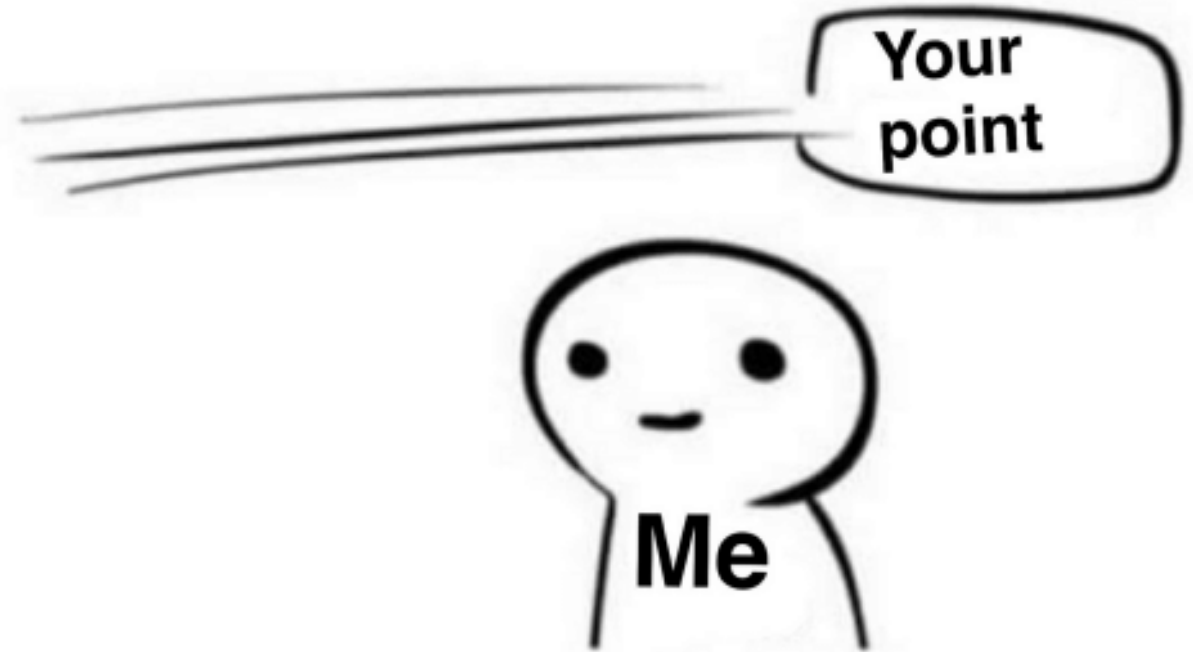
Snapshot of community tools

- Design dimensions/insights
 - Synchronous/asynchronous
 - Participation/reification
 - Individual/group
- Platform/tool placement



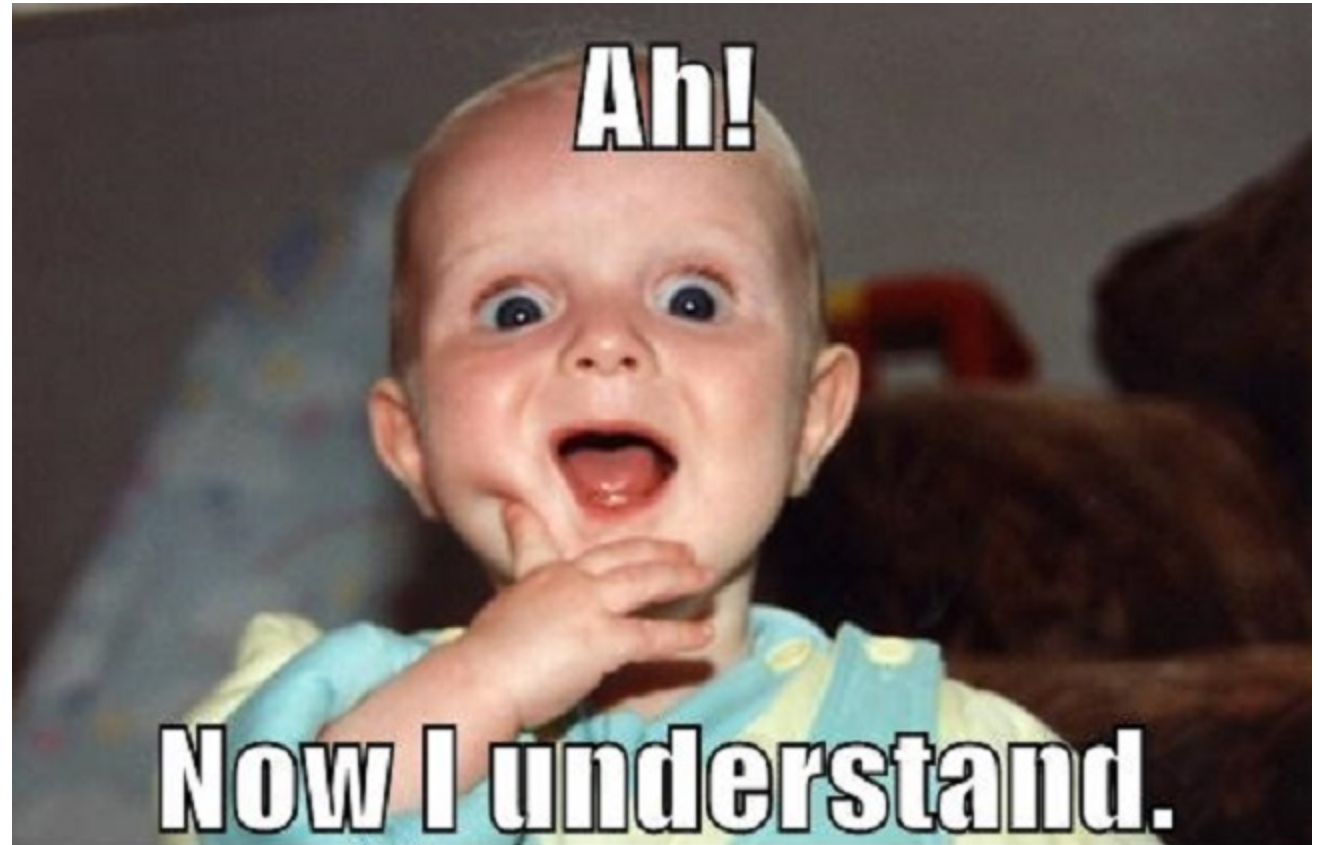
Technology & community dynamics

- Why look at these polarities?



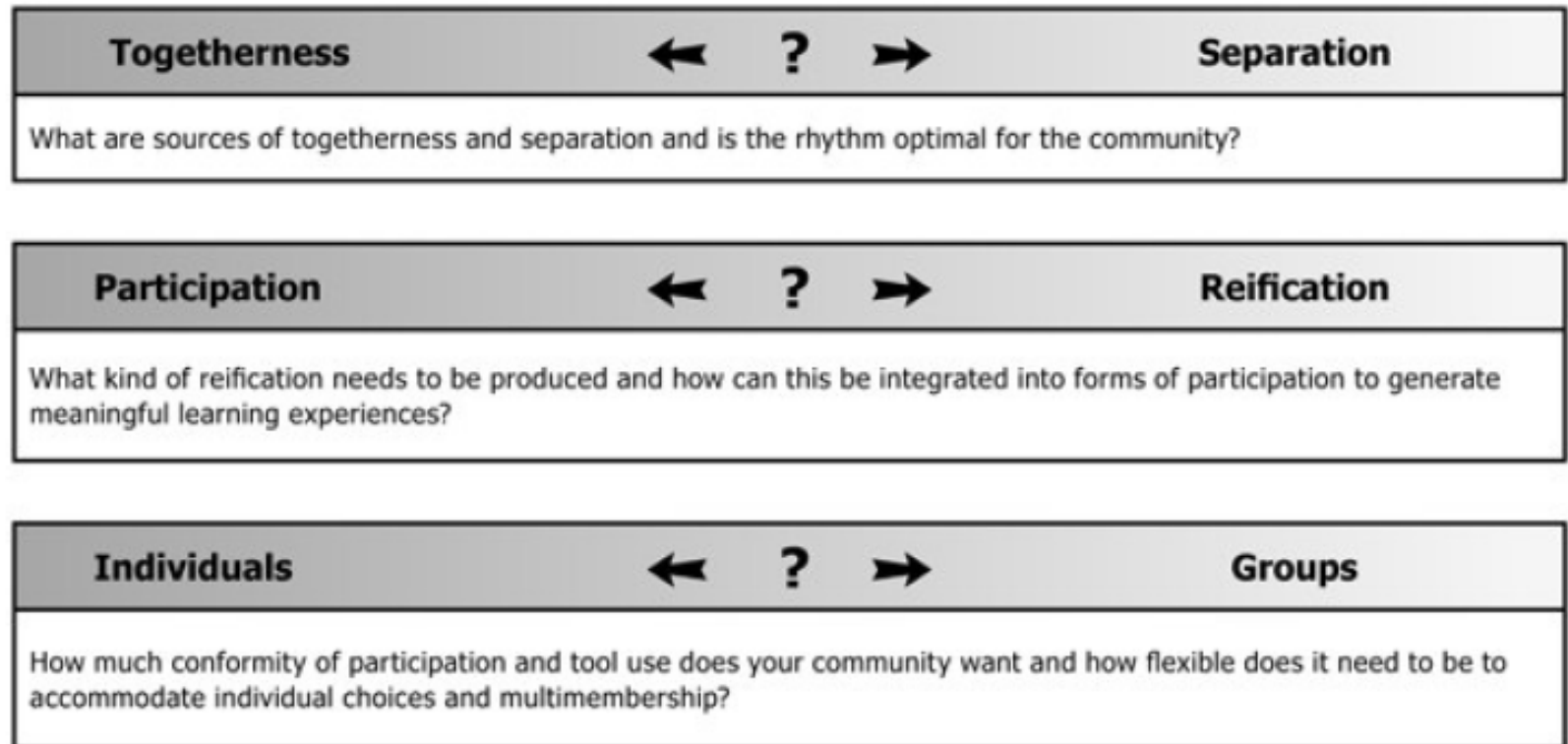
Technology & community dynamics

- Why look at these polarities?
- For technology stewards



Technology & community dynamics

- Why look at these polarities?
- For technology stewards
- Useful visual



Platform/tool abundance, trendy or trouble

- Approaching platform/tool curation



- A. Kaley and M. Rosala (NN/g). Tool Abundance in the Digital Workplace: Trendy or Troublesome (2019). Online: <https://www.nngroup.com/articles/digital-workplace-tools/>

Platform/tool abundance, trendy or trouble

- Approaching platform/tool curation
- Analyzed behaviors



- A. Kaley and M. Rosala (NN/g). Tool Abundance in the Digital Workplace: Trendy or Troublesome (2019). Online: <https://www.nngroup.com/articles/digital-workplace-tools/>

Platform/tool abundance, trendy or trouble

- Approaching platform/tool curation
- Analyzed behaviors
- Cautions



- A. Kaley and M. Rosala (NN/g). Tool Abundance in the Digital Workplace: Trendy or Troublesome (2019). Online: <https://www.nngroup.com/articles/digital-workplace-tools/>

Configuration-level considerations

- Mapping the current state of a community's technology



Configuration-level considerations

- Mapping the current state of a community's technology
- Configuration inventory

Table 4.1 - a sample tool configuration inventory			
Platform 1: Web-based discussion board			
Supported Activities	← Tools →	Key Features	Usage Notes
<ul style="list-style-type: none">• Ongoing community conversations• Communication of key events• Archive of community conversations• Small group workspaces	<ul style="list-style-type: none"><input type="checkbox"/> Discussion tool<input type="checkbox"/> File storage<input type="checkbox"/> Member profiles<input type="checkbox"/> Calendar	<ul style="list-style-type: none">• Multithreaded• Has email interface• Members control their own subscriptions• Easy to create subspaces and define access	This is our primary tool and our community "memory." Most people never go to the web interface and instead use it like an email list.
Platform 2: Teleconference bridge			
Supported Activities	← Tools →	Key Features	Usage Notes
<ul style="list-style-type: none">• Community meetings• Small workgroup meetings• Recorded archives of meetings for those who miss a call	<ul style="list-style-type: none"><input type="checkbox"/> Phone bridge<input type="checkbox"/> Invitation scheduler<input type="checkbox"/> Member profiles	<ul style="list-style-type: none">• Members pay their own long distance• Calls can be recorded through a web interface• Can support up to 50 callers	We are using the phone bridge more and more lately because people feel they are overwhelmed with email.
Platform 3: Community Flickr account			
Supported Activities	← Tools →	Key Features	Usage Notes
<ul style="list-style-type: none">• Artifacts of face to face events, diagrams, and other images	<ul style="list-style-type: none"><input type="checkbox"/> Photo storage<input type="checkbox"/> Tagging/search	<ul style="list-style-type: none">• Stores all community photos• Community shares one username/password	We just started using this tool, so we're not quite clear yet how it fits into our configuration.
A standalone tool: IRC Channel			
Supported Activities	← Tools →	Key Features	Usage Notes
<ul style="list-style-type: none">• Chat during telephone conferences	<ul style="list-style-type: none"><input type="checkbox"/> Individual IRC chat clients	<ul style="list-style-type: none">• IRC is a robust protocol supported by several different chat clients	We value openness and individuals are OK choosing and running own client.

Image refs

- Understanding, <https://i.redd.it/54irlhrlsgj11.jpg>
- Toilet, <https://i.imgur.com/7mSeNNL.gif>
- Tech learning challenges, http://alvinemman.weebly.com/uploads/1/1/4/0/11404117/2914270_orig.png
- Together, <https://pics.me.me/ride-together-dietogether-ride-together-die-together-unicorn-48869776.png>
- Separate, <https://media.makeameme.org/created/Apart-means-separate.jpg>
- Skype, <http://www.shesnotfromyorkshire.com/wp-content/uploads/2009/03/long-distance.jpg>
- Rhythm, <https://i.kym-cdn.com/photos/images/original/000/463/945/adf.gif>
- Participation, <https://www.bodybreak.com/wp-content/uploads/2014/02/Hal-Jo-Book-Cover-370x320.jpg>
- Reification, http://changingminds.org/images/gestalt_triangle.JPG
- Prosumer, <https://image.slidesharecdn.com/fromconsumertoprosumer-110421053501-phpapp02/95/from-consumer-to-prosumer-1-728.jpg?cb=1303364134>
- Interactions, <https://pics.me.me/after-1-hour-admin-sharing-a-funny-pic-about-technology-39496238.png>
- Teach yourself, <https://media.makeameme.org/created/if-you-dont-5bf318.jpg>
- Filter bubble, <https://i.guim.co.uk/img/static/sys-images/Guardian/Pix/pictures/2014/5/12/1399913833176/Information-overload-wisd-011.jpg>
- Dog learning, <https://i.pinimg.com/236x/36/f8/01/36f801db1faa686787834806318c1bd0.jpg>
- Tech-good-bad, <https://media3.giphy.com/media/l41lUJ1YoZB1lHVPg/source.gif>
- Polarities, <https://i.imgflip.com/1pufk1.jpg>
- Your point, <https://pics.me.me/your-point-me-34465067.png>
- Understand, <https://topfamilymag.com/wp-content/uploads/2018/03/now-i-understand.jpg>
- Where are we, <http://www.gamesdash.com/limg/1/608/where-are-we.jpg>
- Too many apps, <http://images.gawker.com/t2lncryddoov6qogn27c/original.png>
- Tech, <https://www.askideas.com/media/48/With-This-Technology-We-Will-Bring-The-United-States-To-Its-Knees-Funny-Technology-Meme-Image.jpg>