When thought-worlds collide
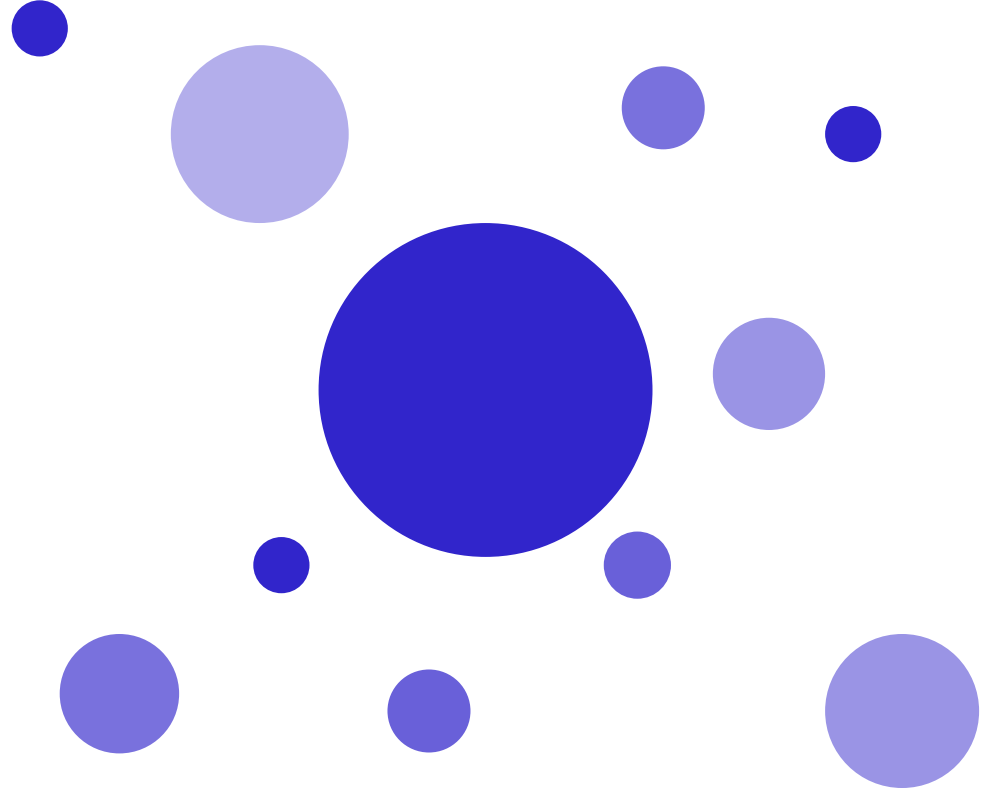
Collaborating between research and practice

Lin Nie, Ph.D. | Senior User Researcher, Peloton | Advancing Research 2021

Once upon a time….

> "
>
> *This is too academic!*
> _____
>
> **CEO**

The research-practice gap

Like Don Norman (2010), I also resist the research-practice gap

The Research-Practice Gap: The Need for Translational Developers

Donald A. Norman
Nielsen Norman Group, Northwestern University, KAIST Industrial Design | don@jnd.org

"Oh, East is East, and West is West, and never the twain shall meet."
(Rudyard Kipling, 1892. Barrack-Room Ballads)

There is an immense gap between research and practice. I'm tempted to paraphrase Kipling and say "Oh, research is research, and practice is practice, and never the twain shall meet," but I will resist. The gap between these two communities is real and frustrating. Sometimes the gap is deliberate. Some researchers proudly state they are unconcerned with the dirty, messy, unsavory details of commercialization while also complaining

that can readily be translated into practice.

The gap between researchers and practitioners extends to the professional societies. The major societal home for many researchers is the Association for Computing Machinery's Special Interest Group on Computer-Human Interaction—ACM SIGCHI—the same group that brings you this magazine. Although CHI pretends that it is home for both researchers and practitioners, that is largely a delusion. In the major conferences, most especially its flagship conference, CHI proudly proclaims that it includes people

damental distinction remains strong. I know this problem well because I faced it when I headed a large research group in a product company (the Advanced Technology Group at Apple).

The gap between research and practice is fundamental. The knowledge and skill sets required of each group differ. Consider the research community within design: the area called design research. This community attempts to understand basic patterns of human and social behavior and how technology affects both. Most of the studies focus upon problems and difficulties, in part because

The realization…

Thought-worlds, defined …

Foundation Research

Theoretical Sciences such as Psychology

Anthropology | Information Science| Sociology | Political Science, etc

Applied Research

Human computer interaction (HCI)

Design Practice

Use human-centered principles (e.g., research findings from applied or scientific research) to create something people use

Design Practice

Thought-world

What personality should my voice assistant / chatbot have? Should it have an avatar? Or UIs that look like humans?

Thought-world

What is personality? Can you even enculturate a bot? What is anthropomorphism?

Foundation Research

Researcher-Practitioner Twitter Interactions
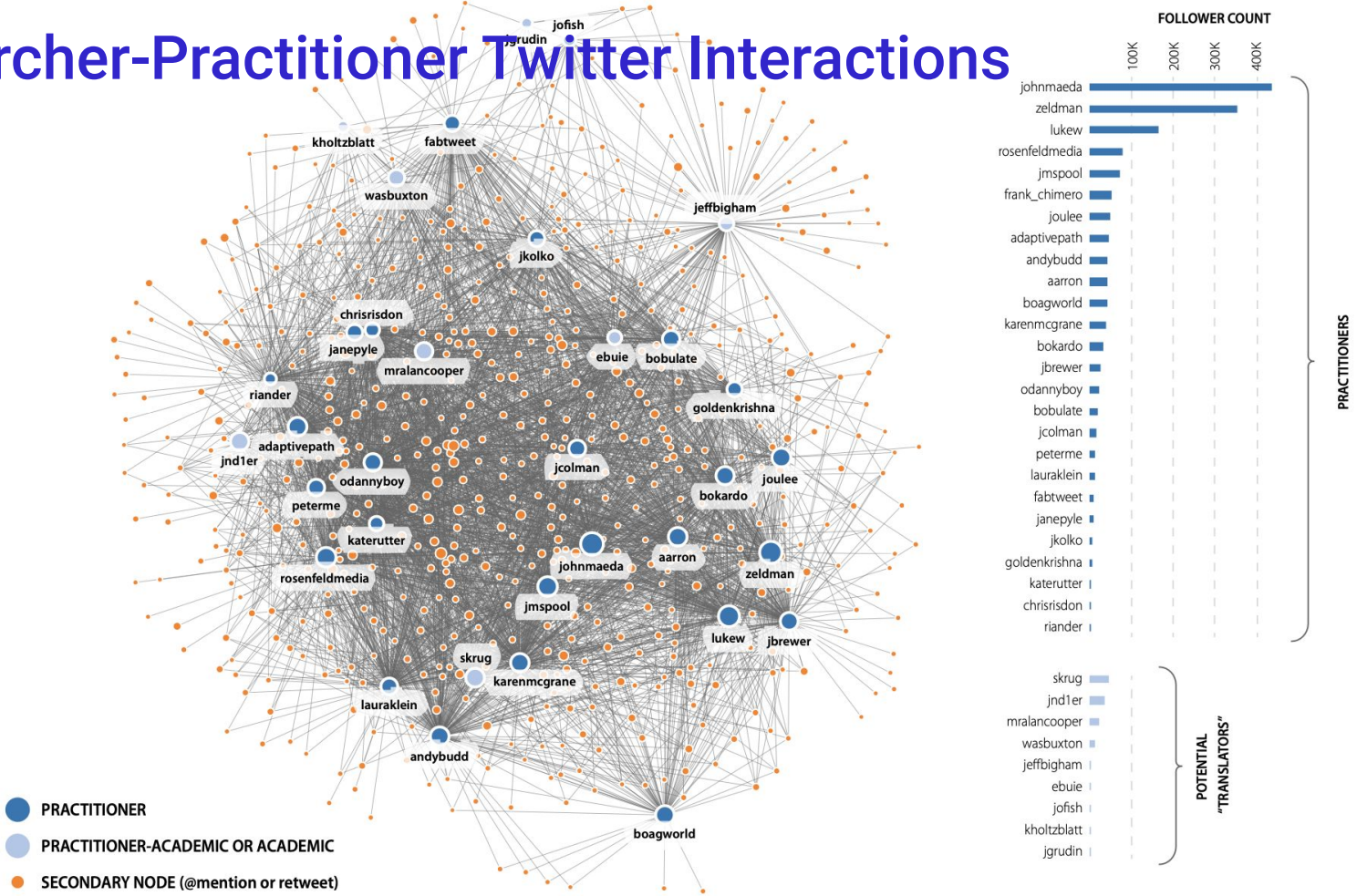
'**Multi-discipline**' is the norm

Research teams are more multidisciplinary than ever

Call for '**translators**'

User researchers with diverse backgrounds are uniquely positioned to promote understanding between these thought-worlds so relevant knowledge can be put to work

How does research and practice differ?

Research vs. Practice: The differences

Purpose of industry practice:

Add value to people's everyday life

Traits

Fast

Accessible

Actionable / Intuitive

Success measure: "Ship it!"

Purpose of academic research:

Advance knowledge

Traits

Slow

Hard to read and find

Hard to act on

Success measure: "Publish or perish"

Research as a practice

Thinking motivated by a business goal, stakeholders' goal, or a public-ready goal

Need to bring real outcomes to users

Certainty: Assertiveness is considered great

> Just say "Yes and'!

Research as a science

Thinking for the sake of thinking, motivated by intellectual freedom

Need to be self-critical, comparative; science* is not unified

Uncertainty: Being critical is considered great

> *"Doubt is an uncomfortable condition, but certainty is a ridiculous one."* - Voltaire

*Speaking from psychology and does not necessarily apply to other domains

How are research and practice similar?

The process of doing science*

is actually very similar to the process of doing a user
research project in a product life cycle

The anatomy of a psychology journal publication

1 **Abstract**:
Snapshot of the full paper

4 **Results**:
The 'What' of insights

5 **Discussion & Limitations**:
- The 'So What'
- Caveats and future directions

2 **Introduction**:
- Bring the readers up to speed to the topic, why should one care?
- What's the gap? Novelty?
- State how the research fills the gap

3 **Method**:
How is data collected
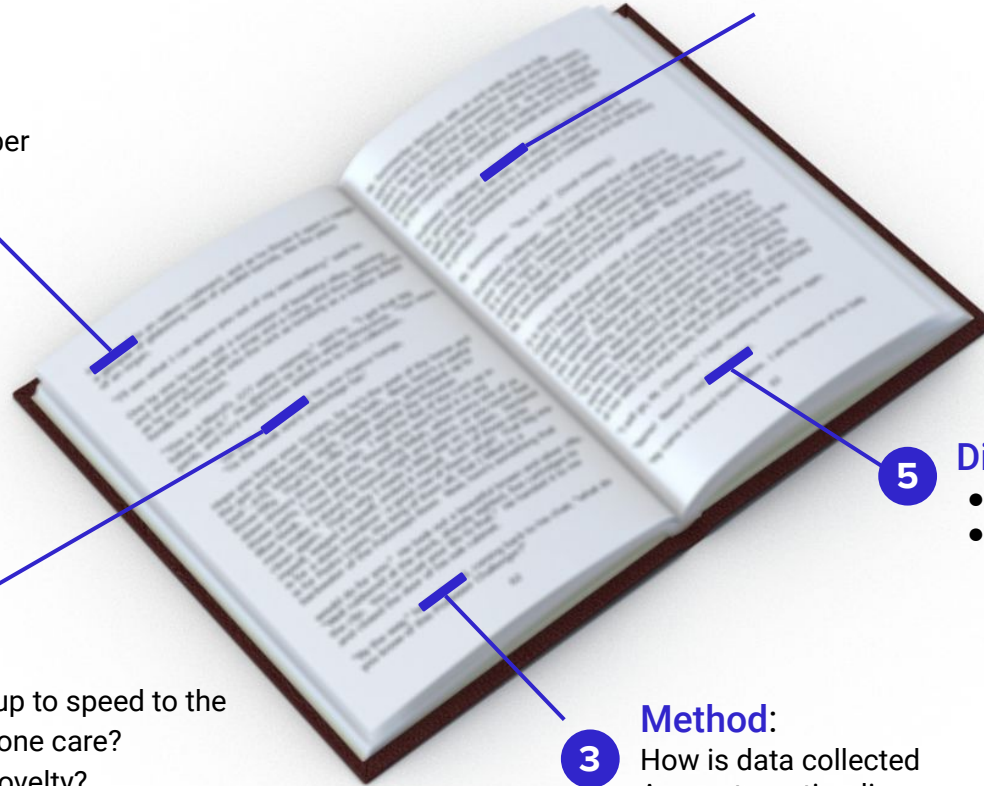Apparatus, stimuli
How is the data analyzed

Advancing science is a matter of chance, strategy, and marketing too

Misconception: science is pure and truth just prevails

Unseen research: Story of Copernicus
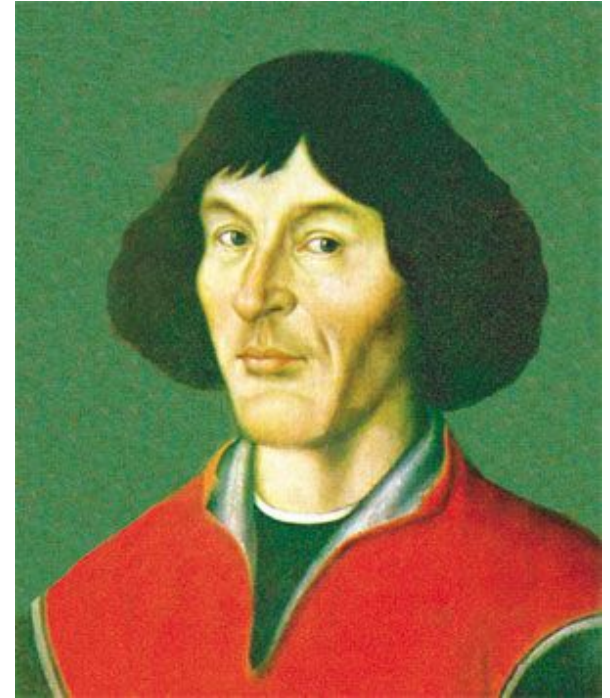
Unseen research: Story of W.E.B. Du Bois

> *How many truth-tellers find their work thwarted?*

Mimi Onuoba (2020)

How might we better collaborate?

Tackle trust and attention-based barriers

10 Simple Steps to Instagram Your Research Paper

AX Ali, Ph.D. · Mar 3, 2020 · 5 min read ★

457
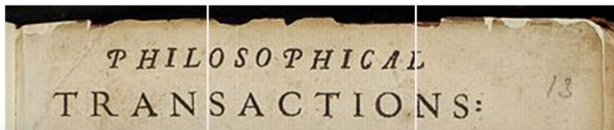posts

76K
followers

809
following

Follow ▾

The UX Academy
Hosted by **@theaxali**
Connecting academia and practice in the field of HCI through innovative multimedia exchange of knowledge.
axali.me

PHILOSOPHICAL
TRANSACTIONS:

It is absolutely ridiculous that in 2020 we are still spreading scientific knowledge in the same format we used in 1665.

Times have changed, and the way we consume information has changed radically in the last 30 years. Yet, we still send our scientific studies as long dry two-column walls of text into the world.

Drawing on messaging design and marketing communication studies, five attributes of research summaries affect their appeal to non-researchers

1075 entrepreneurs were shown different research summaries and asked which one they prefer to receive as a research report

Not too long (but not too short!)

Minimize jargon

Cite credible sources

Use more visual, media!

Adapt to the stakeholder level of involvement

Work cited is in Appendix

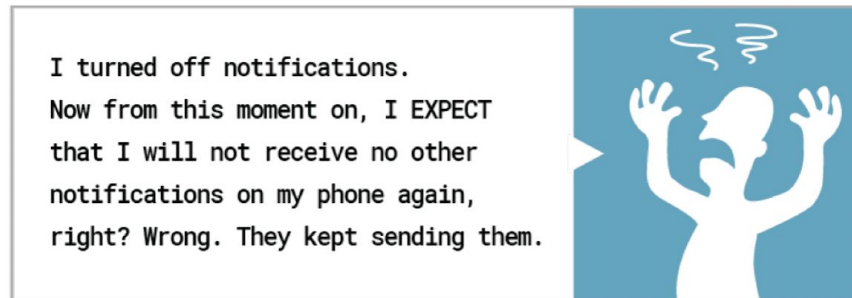Rewrite scholarly content to be more **actionable and to the point**

Design Implication (DI)

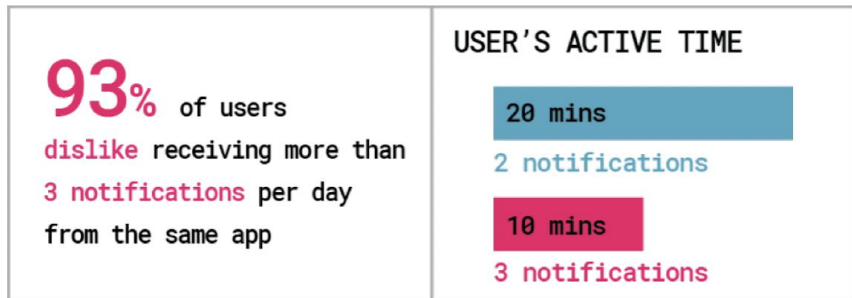We propose skewing visualizations to present favorable comparisons. Designers can make user performance appear closer to their comparisons.

DI rewritten by a designer

To motivate gamers to play more, upscale their performance so it looks closer to their target performance metrics

Rewriting a design implication found in academic research to make it actionable

Work cited is in Appendix

93% of users **dislike** receiving more than **3 notifications** per day from the same app

USER'S ACTIVE TIME

20 mins
2 notifications

10 mins
3 notifications

I turned off notifications. Now from this moment on, I EXPECT that I will not receive no other notifications on my phone again, right? Wrong. They kept sending them.

Rewriting quantitative finding and visualizing user quote to make it more digestible

Work cited is in Appendix

Self-Disclosure and Perceived Trustworthiness of Airbnb Host Profiles

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ABSTRACT

Online peer-to-peer platforms like Airbnb allow hosts to list a property (e.g. a house, or a room) for short-term rentals. In this work, we examine how hosts describe themselves on their Airbnb profile pages. We use a mixed-methods study to develop a categorization of the topics that hosts self-disclose in their profile descriptions, and show that these topics differ depending on the type of guest engagement expected. We also examine the perceived trustworthiness of profiles using topic-coded profiles from 1,200 hosts, showing that longer self-descriptions are perceived to be more trustworthy. Further, we show that there are common strategies (a mix of topics) hosts use in self-disclosure, and that these strategies cause differences in perceived trustworthiness scores. Finally, we show that the perceived trustworthiness score is a significant predictor of host choice—especially for shorter profiles that show more variation. The results are consistent with uncertainty reduction theory, reflect on the assertions of signaling theory, and have important design implications for sharing economy platforms, especially those facilitating online-to-offline social exchange.

Author Keywords
Airbnb; self-disclosure; trustworthiness; sharing economy; social exchange.

ACM Classification Keywords
H.5.m. Information Interfaces and Presentation (e.g. HCI): Miscellaneous

INTRODUCTION

Airbnb is an online lodging marketplace for short-term peer-to-peer rentals, facilitating monetary and social exchange

between individuals [29]. On Airbnb, *hosts* can list places (e.g. rooms, apartments, houses, or even boats and castles) for *guests* to rent. The guest is often a temporary visitor, and is not acquainted with the host beyond Airbnb. At time of writing, Airbnb reports two million listings, and 60 million guests on the platform [1].

The main utility of Airbnb—identifying potential lodging resources offered by unknown individuals—comes with risks that affect both guests and hosts who wish to participate in the exchange. A potential host may worry about guests damaging their property. A potential guest may fret about their physical safety, the truthfulness of the quality of the property being advertised, or whether the host would be kind enough to provide assistance in exigencies [17]. Establishing guest-host trust helps manage such uncertainties and risks—making trust a crucial factor for the success of such social exchange sites.

There are several ways that Airbnb designs for trust. Airbnb has an assurance policy and a reputation system in place, in addition to making information about the host and property readily available before booking. On Airbnb, each host has a profile page that includes photos, a text-based self-description, social media verification status, and reviews (if any) from other Airbnb users who have stayed with the host. These profiles contribute to a guest's decision making process [36], and help establish perceived trustworthiness [17]. In this work, we focus on host profiles, especially the text-based self-description and its role in establishing the perceived trustworthiness of hosts in the eyes of potential guests.

Emerging literature is examining how people assess trustworthiness through self-disclosures made in online profiles. The *Profile as Promise* [15] conceptual framework, for example, incorporates the risks and rewards associated with assessing signals in a profile for whether said profile's promises can be trusted. Researchers had examined how individuals produce and assess trustworthiness signals in online dating profiles [41] and in online résumés [22]. However, we still know very little about what people self-disclose, and how that information is evaluated for trustworthiness in the context of sharing economy platforms such as Airbnb.

To Gain Trust, Write This

Xiao Ma Follow
Feb 24, 2017 · 4 min read

Imagine you're planning a trip and two strangers offer to host you in their homes for a fee. Both have a one-line profile. The first profile says, "Life is beautiful, so let's enjoy it." The second says, "We look forward to hosting you." All else being equal, which of these strangers would you feel more comfortable staying with?

This kind of process — choosing whom to trust people based on their online profiles — determines far more than just where you sleep on vacation. Online profiles affect how fast your ideas spread, whether you get hired, and sometimes whom you end up marrying. Unfortunately, profile designs are often flawed, and at least partially contribute to redlining on Uber and Lyft and racial discrimination on Airbnb. We therefore need a better understanding of how profiles are perceived.

	0%	17.5%	35%	52.5%	70%
Origin or Residence	I am from Ireland but live in Manhattan.				
Work or Education	I'm an architect, from Mexico City.				
Interests & Tastes	I enjoy nature and meeting new people.				
Hospitality	I look forward to your stay.				
Travel	Frequent flyer junkie.				
Relationships	We've been married for 26 years.				
Personality	I'm fun and easy-going.				
Life Motto & Values	My motto, I guess, is: Life's too short.				

Eight most frequently mentioned topics in Airbnb hosts profiles and their likelihood of appearance.

Now, not all hosts have the same relationship with their guests. *On-site hosts* share living space with their guests, while *remote hosts* live somewhere else. What we found is that on-site hosts write 18% more words than remote hosts (66 words v.s. 56 words on average), and they are more likely to talk about their interests, tastes, and personality — perhaps angling for a better match.

Seize the right moment in the design process to bring in research

What resources other than academic research do designers use in the design process?

Designers: When I am…

RESEARCH

Understanding…

User research, academic research, books, **articles** Reputable case studies on Medium, Slack, Reddit, etc

Brainstorming…

Resources from previous phase, **Dribble, Google Images,** Pinterest, Ideation cards, science fiction, design books, pop psychology, etc.

Building…

UI libraries, blog posts, App Stores, Google Play, Product Hunt Forums StackExchange, StackOverflow, Quora, Forums

RESEARCH

Advocating…

Evidence for chosen design, **user research, trusted resources**; academic research

Resources in bold are most used by designers in the study

Redesign tools and processes for how you bring research resources to design

S. Jobs 3:39 PM
Help!

slackbot 3:39 PM
Hey Lucas! What are you designing? 😄

S. Jobs 3:39 PM
a leaderboard

slackbot 3:39 PM
Awesome! What activity are you performing right now? (Understanding, Brainstorming, Building, Advocating)

S. Jobs 3:40 PM
building

slackbot 3:40 PM
Here are some actionable resources for building leaderboards! You can find more resources here!

Leaderboard wireframe

Article about how to design the optimal leaderboard

Start a conversation to learn more about this.

.sketch file

written by an expert in gamification
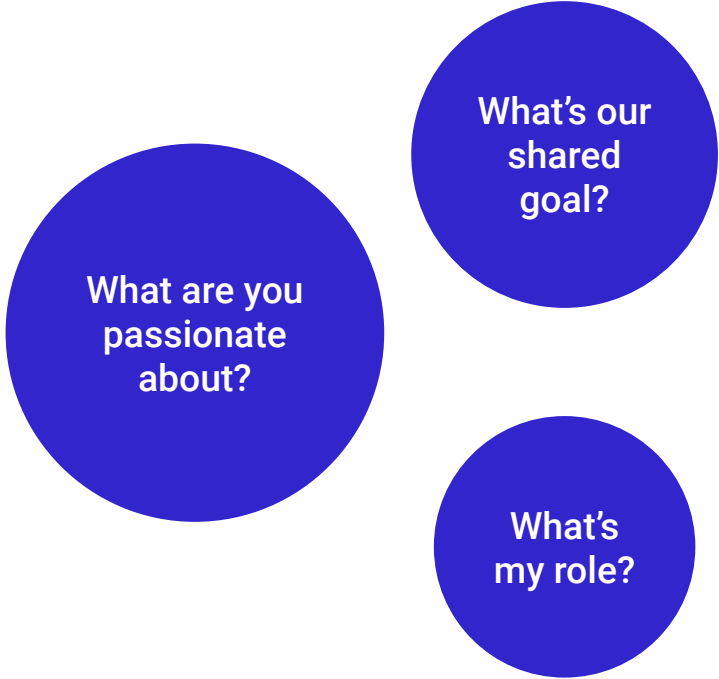
Ask expert

Work cited is in Appendix

Team collaboration tips

~~Business as usual~~ Teammates are people first

Before collaborating, ask teammates these questions:

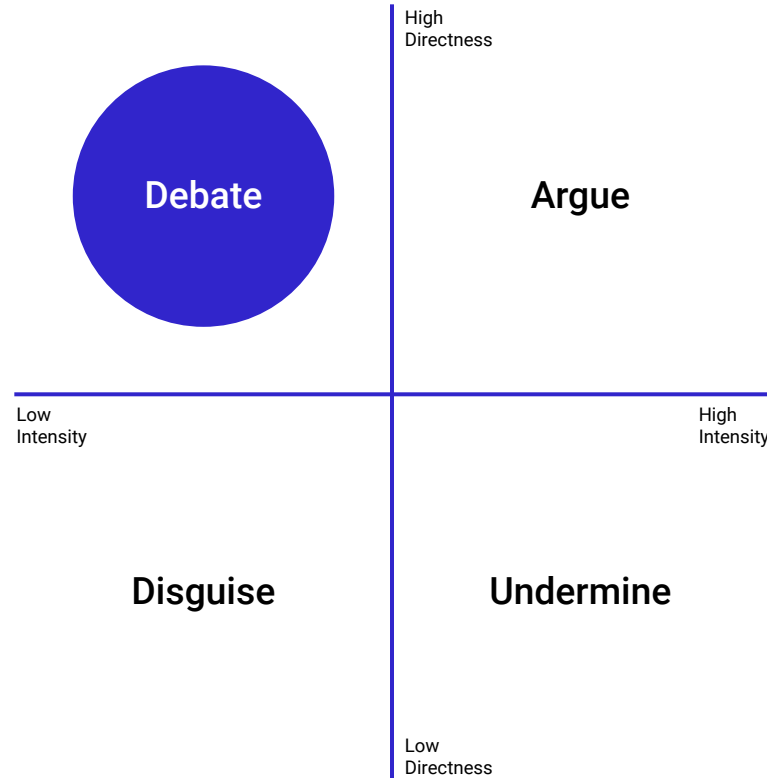Make sure we have a common understanding of the project and clarify roles within the team.
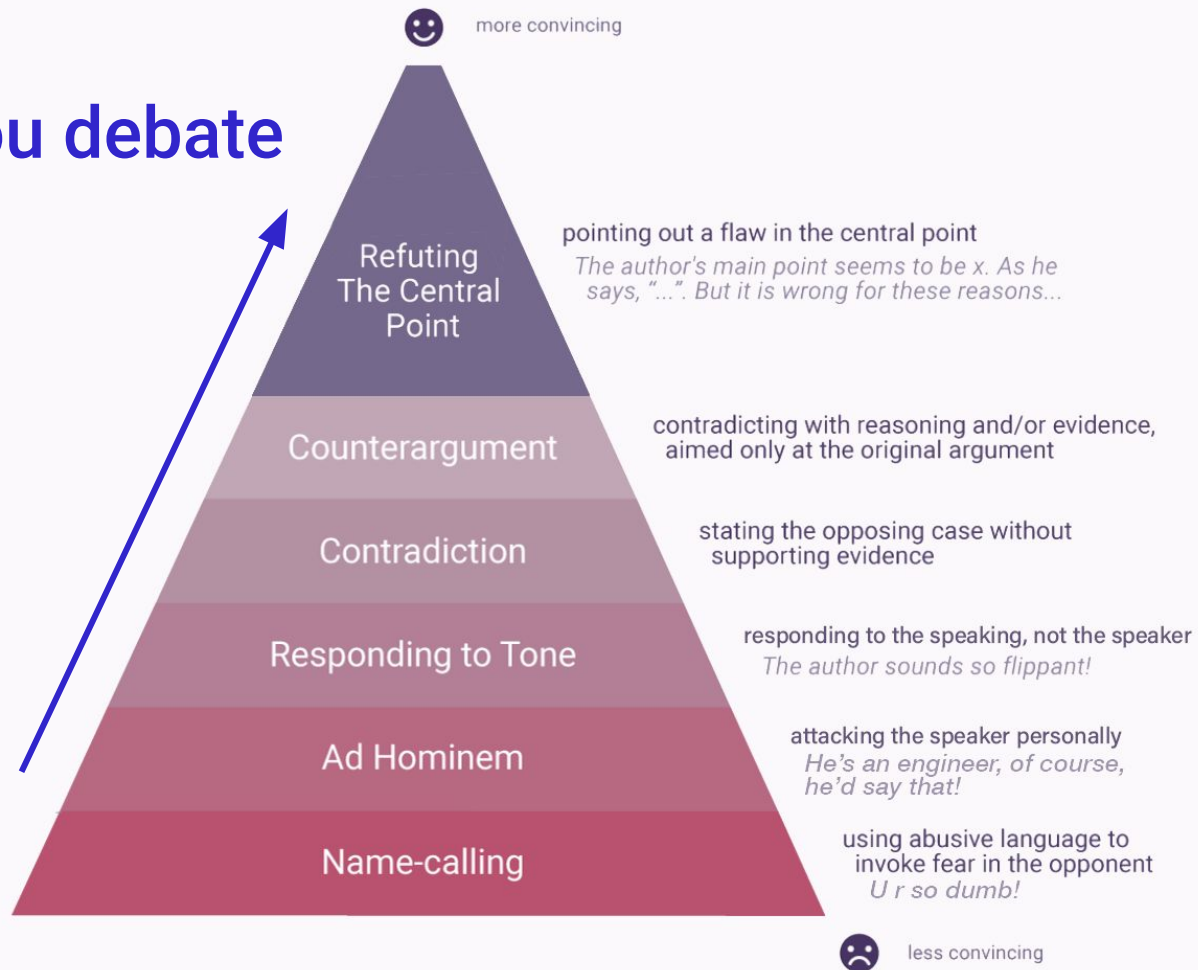
What are you passionate about?

What's our shared goal?

What's my role?

Steer 'Conflict' into the 'Debate' zone

Be aware of how you debate in a team setting

☺ more convincing

Refuting The Central Point
pointing out a flaw in the central point
The author's main point seems to be x. As he says, "...". But it is wrong for these reasons...

Counterargument
contradicting with reasoning and/or evidence, aimed only at the original argument

Contradiction
stating the opposing case without supporting evidence

Responding to Tone
responding to the speaking, not the speaker
The author sounds so flippant!

Ad Hominem
attacking the speaker personally
He's an engineer, of course, he'd say that!

Name-calling
using abusive language to invoke fear in the opponent
U r so dumb!

☹ less convincing

from essay "How to Disagree"
by **Paul Graham**, 📖 *j.mp/PG-12*

© Adioma

visualized by **Anna Vital**

Closing thoughts…

ME

How can I say this so we can stay closer to each other?

DAD

"

It's our job to see the person in front of us, and if that means having an uncomfortable conversation, have that conversation, please.

Claudia Rankine (2020)

> *Know all the theories*
> *Master all the techniques*
> *But as you touch a human soul*
> *Be just another human soul*

Carl Jung (1928)

THANK YOU

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Appendix

For work cited in the presentation, please visit the doc [here](#).