

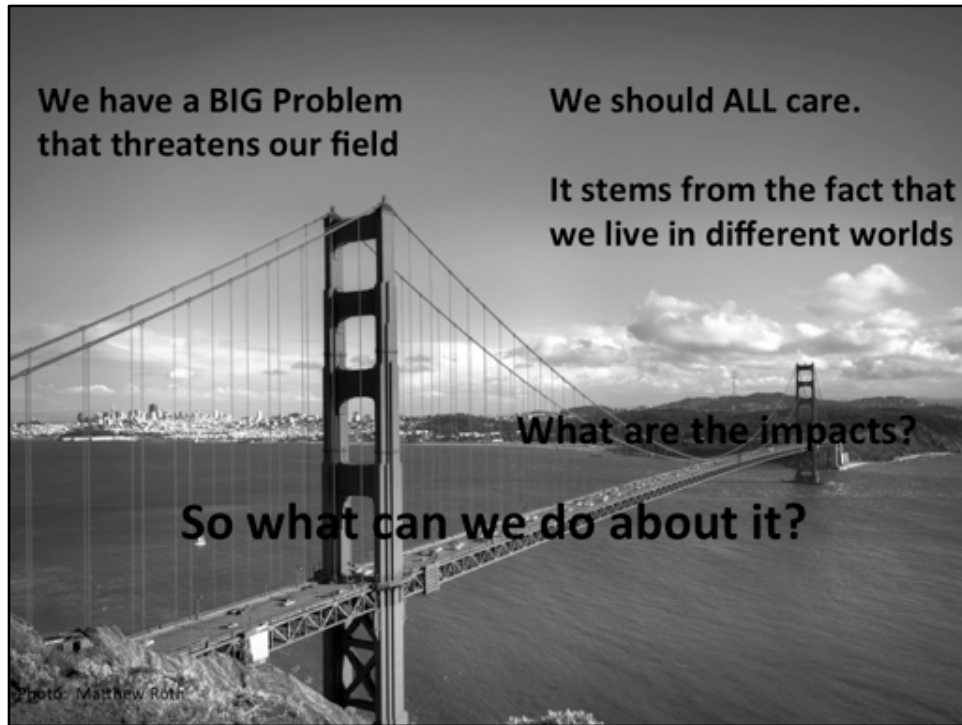
Great honor

Reflecting back on my career, SIGCHI and the CHI conference (which we formed in 1982) has been a wonderful luxury and this lecture is a great opportunity to share with you something that is near and dear to my heart.

May seem strange to some of you, but I, like many practitioners I've talked to, have often felt like a second class citizen. CHI's prestigious core = Papers – I've never written one because I believe it is very unlikely to get in – MUCH less likely than an academic paper.

This is, in part, because the way we assess papers is pretty much antithetical to the kinds of work I could write up. At CHI, that leaves venues like Case Studies (plug here) and other things that are found in the Extended Abstracts 0 immediately identifiable by the landscape orientation.

I believe that this is because of the problem I'd like to talk with you about today.



Today, I want to share with you [just read it]

NOTE: I will present generalities –things are not black and white. Also there are, of course, both academics and practitioners who are already doing a great job at bridging the gap, working together, etc.

There are masters programs for practitioners (UC Irvine, Carnegie-Mellon, Michigan, Georgia Tech, Univ of Washington Design & Engineering School Bently College, to name a few)

ALSO NOT PERSONAL – most of us have very cordial relationship and are good friends with those “on the other side”

Still, I believe that this problem is very serious and that it threatens our field.



A wall – between the world of academia and the world of practice
Specifically Gap in the perspective or mindset
This can even occur within companies where there is wall between a research organization and the rest of the company.
Probably few have lost sleep over this – but it really is a huge problem that I believe threatens our profession
I do know that the SIGCHI leadership has certainly struggled over this – esp. how to evaluate and value practitioners
And from a historical perspective, many practitioners got fed up with CHI in 1991 and split off to form the UPA – now UXPA. (Originally 50 members, now >2400 around the world)

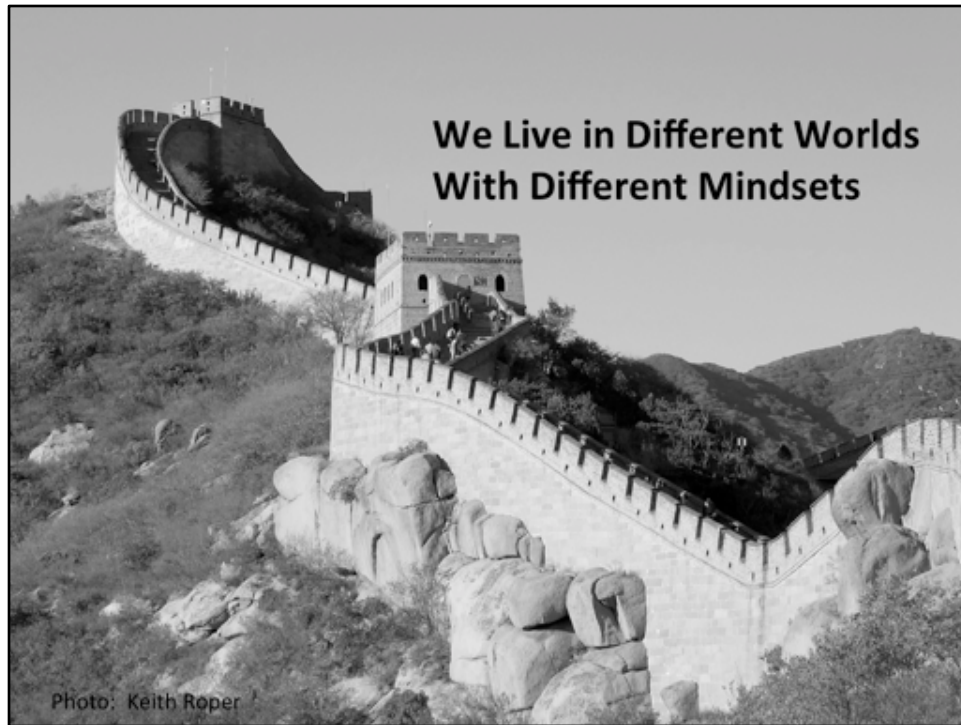


This wall damages us as a profession. It has effects in practice AND in research. Specifically, 3 groups are impacted:

1. Students: Not prepared for jobs in industry (at a time when a larger number of students are moving into each year)
2. Academics: preparing students of course, but also remaining relevant, getting funding in lean times. Also lack of access to data collected in companies such as datasets makes research more limited in scope –Without practitioner input, Academics can miss opportunity for relevant research
3. Practitioners: If we lose our scientific foundation, risk of becoming mere technicians, vanishing ("Anyone can do it) This deskills our work, making it more tactical, more peripheral, less impactful and less interesting (Indeed, this is already starting to happen)

:Loss of relevance, loss of impact

The fact is we are ALL paying a price for this wall and it's up to us to bring it down



In order to address and solve this problem, we must understand the very real differences between the mindsets we have]

Not on a personal level, but some take it that way and in some cases, this becomes active hostility.

We throw epithets at each other – “academics are “boffins in the ivory tower who are navel gazing and don’t know about the real world ,” and practitioners are “fuzzy-headed opportunists using questionable methods” I’ve even heard of practitioners being called “whores” by academics.

Harsh tone aside, we have to admit that there is some truth to these words

We’re never going to solve the problem as long as we hold onto these beliefs (even in private), as long as we are disrespectful. And lack Maturity and understanding of the relatively of own way of thinking.

Part of the problem is that few of us have the experience of both academic and practitioner worlds.

That is what I want to share with you now.



Compare and contrast



As we all know
PUBLISH OR PERISH
Mindset in academia has to be to publish or perish –
Tenure is the goal for younger researchers, advancement to Professor rank for those
further along in their careers
Secondary goal: Advancement of knowledge
Also TEACHING



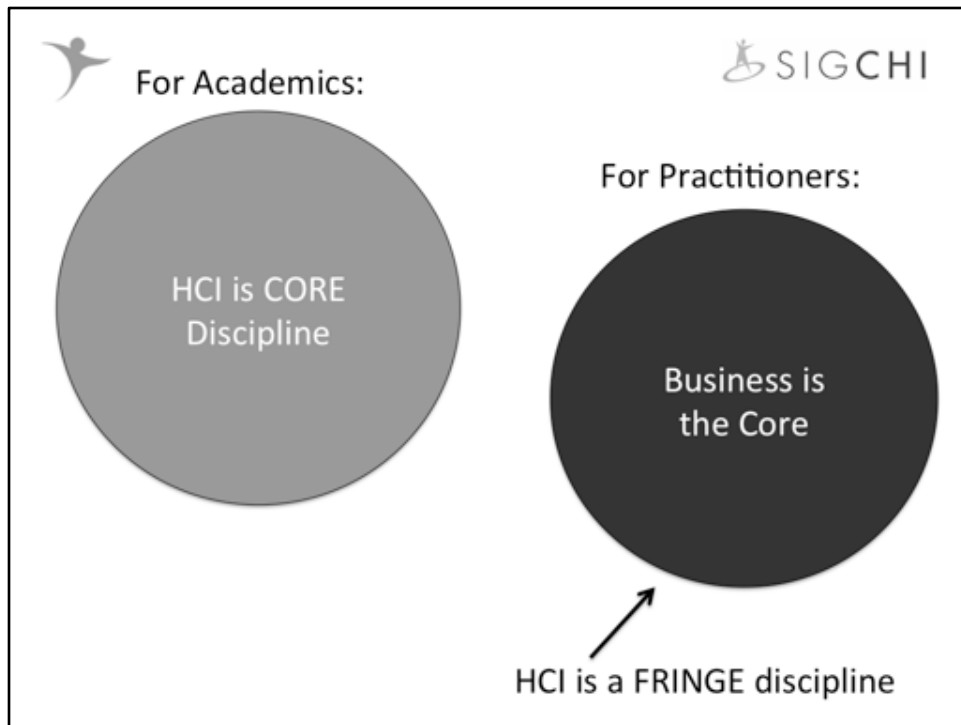
The world of the practitioner is very complex – it is a DIFFERENT intellectual enterprise from that of academia, but it is a very legitimate one
Practitioners = in many companies around the world
Our mindset is PRODUCE OR PERISH– and our goal is to contribute to product success
Secondary goal – integration of HCI,UX, usability into our company’s development processes, buy-in
ROI



**“It’s not rocket science...
It’s a LOT harder!”**

--Slogan seen in a practitioner’s office

From the cube of an actual rocket scientist (Ph.D. in astrophysics from Harvard) who is now doing UX work



Practitioners: often scattered into work groups where they're the only HCI person/
Therefore, they have to work collaboratively with others to survive and have to
integrate into the team

In some companies (like Google, Facebook, Yahoo, etc. there are multiple UX people
on a team but HCI and UX are STILL fringe disciplines

Their Impact comes not from the soundness of their methodology (which no one on
their team is likely to be able to comment on) but on personal influence,
persuasiveness, charisma, conciseness, how to communicate with others not in the
profession



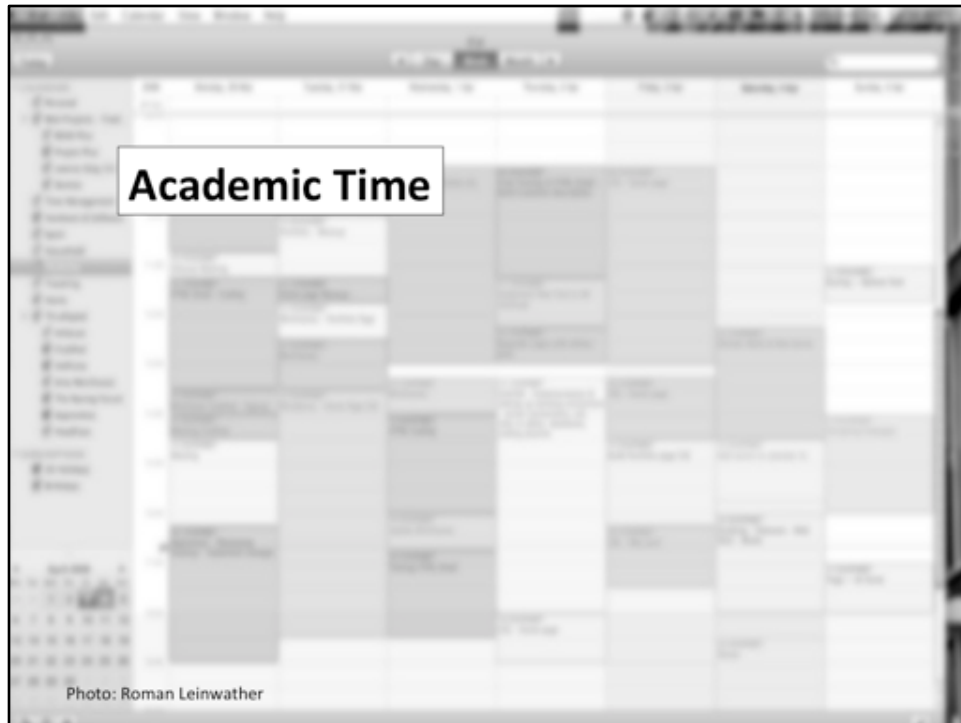
Little specialty switching (minor shifts with research)
Relatively less job movement
Up academic ladder
This tends to reinforce the mindset and expectation



More movement including in and out of related fields
And up the corporate ladder
Requires practitioners to become adept at switching mindsets – which can be good or bad
Switching between content areas, organizational roles, different departments or even different companies
And for consultants, this is the name of the game



EVERYONE IS WORKING HARD AND EVERYONE FEELS THAT THEY
WORK HARDEST!
THERE ARE DIFFERENCES IN
HOW TIME IS MEASURED



Academic Time is measured in terms, academic year
Scheduling around teaching, research milestones, grant cycles
In general LONGER lead times
Competition can drive speed (“we’ve got to get results out before our rival CMU!”)
and so can industry partnerships



In general SHORTER lead times
Practitioner Time = measured in
hours, days, weeks, and rarely quarters
Scheduling around Internal meetings, Deliverables, Product Lifecycles



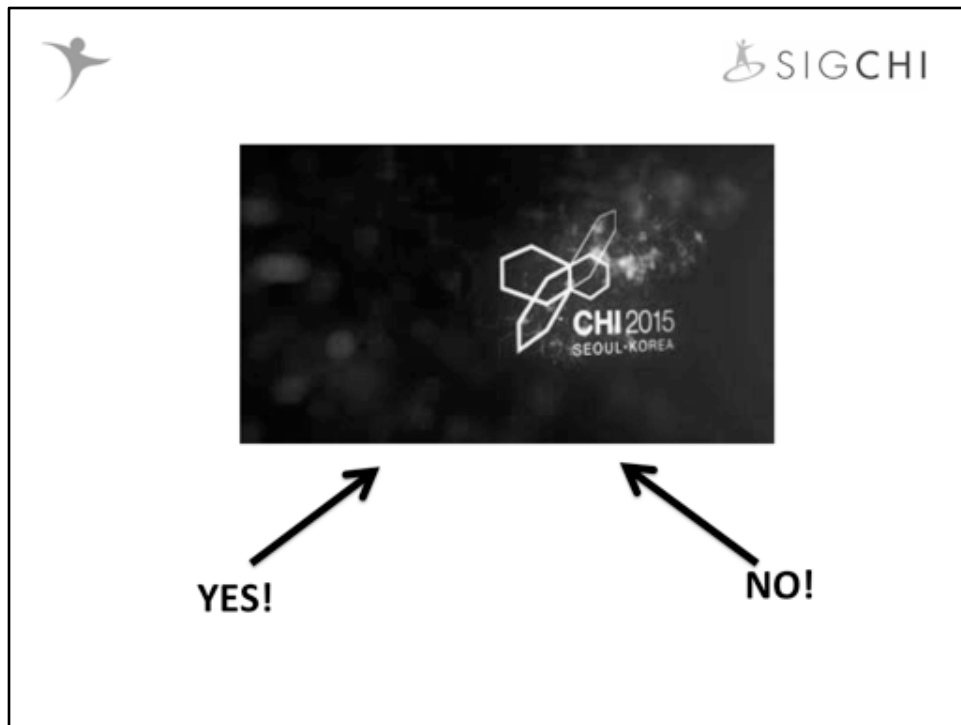
Academics: Research and grants = expected

Publishing, citations, tenure, graduate students graduated (and where they go) = signs of merit

Impact = H index, quality of publications, influencing your area or becoming “the” expert in what you work on



Internal reputation and raises = signs of merit
 Time and team Pressure to be flexible and creative in coming up with new
 approaches to getting data
 Very little time or reward from publishing



BIG DIFFERENCE in support for going to conferences

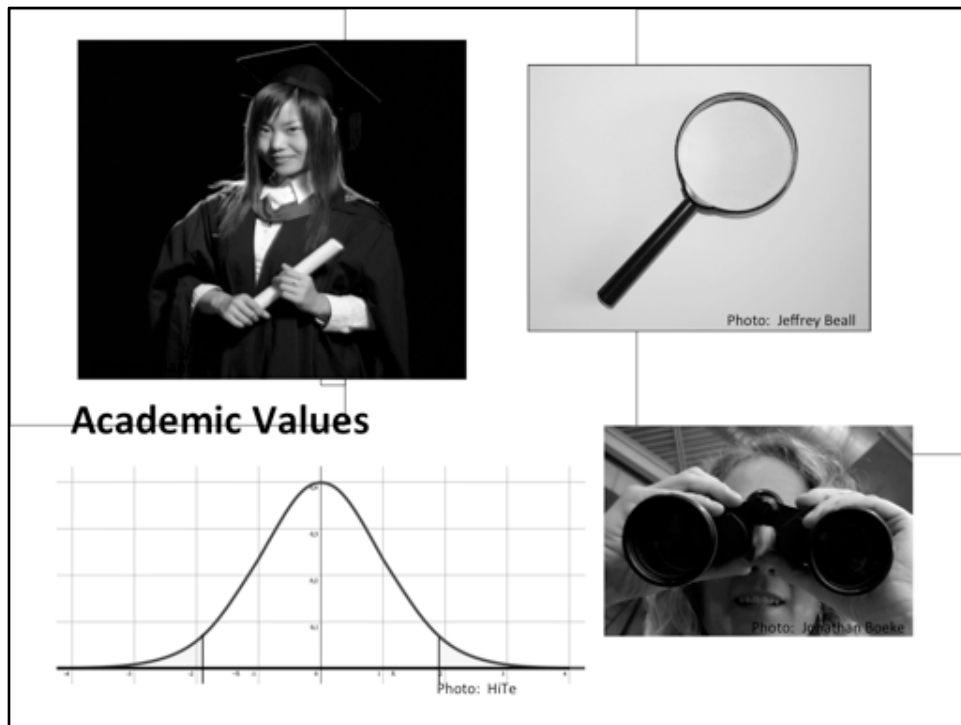
As long as CHI acceptances for papers are largely academic, practitioners won't be able to make the case to come (in companies that even support conference attendance at all) as easily



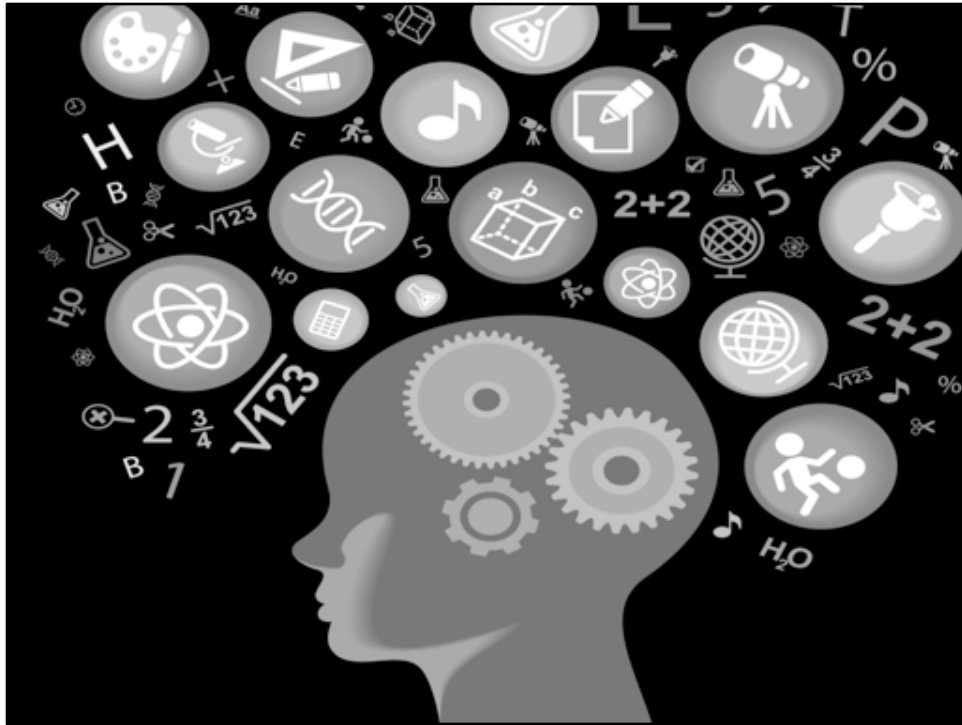
Variety of sources of funds – some University funding but mostly (thought not entirely) external to the organization Research grants
 (mostly) REVIEWED BY PEERS who understand your discipline
 Funders expect advancement of knowledge and understand the value of the research
 LENGTH and references = convincing



Funding through corporate budgets – departmental or unit allocations
Reviewed by people OUTSIDE your discipline
Have to “sell” UX/HCU constantly (even in organizations that are bought in)
Funders expect ROI or contribution to commercial success
Brevity = convincing (“elevator pitches”)



Isolating variables,[funnel] teasing apart dynamics – looking at things in detail
 Theme- you become known for it
 Statistical significance in many studies while others use Qualitative methods → either way, rigorous analysis
 Goal = deepening knowledge and creating new “stuff” – interaction styles, etc. that MIGHT later be turned into a product if there is a mechanism for this to happen (spun off often)
 Judged by PEERS = Insiders
 Academic title has value



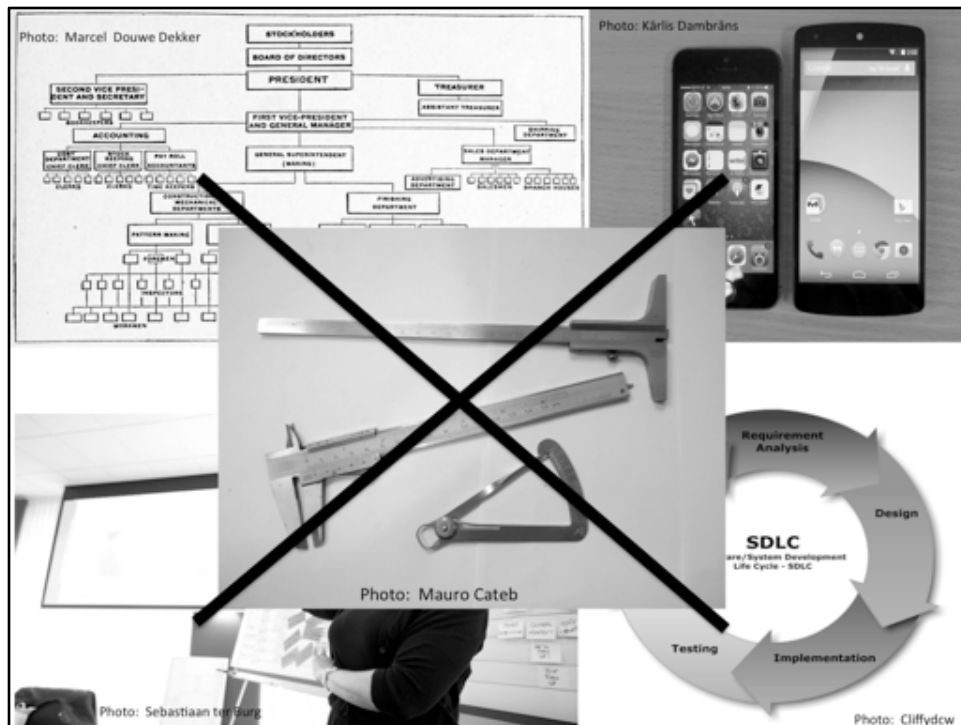
Thinkers

Understanders

Explainers

Explorers

The very grant title of “Principle Investigators” says it all



Must make design decisions based on complex interaction of factors
 Emphasis on PRACTICAL significance, NOT on statistics for the most part.
 Pressure for results, teamwork. “buy in”
 Rigorous measurement and publication of findings (often) impossible
 Exception to this is companies like Fidelity that do a lot of A-B testing, or companies using Big Data or producing at scale (like Google) – but those stats are often themselves routinized and gathered quantitatively



[This is CHI83 in Boston]

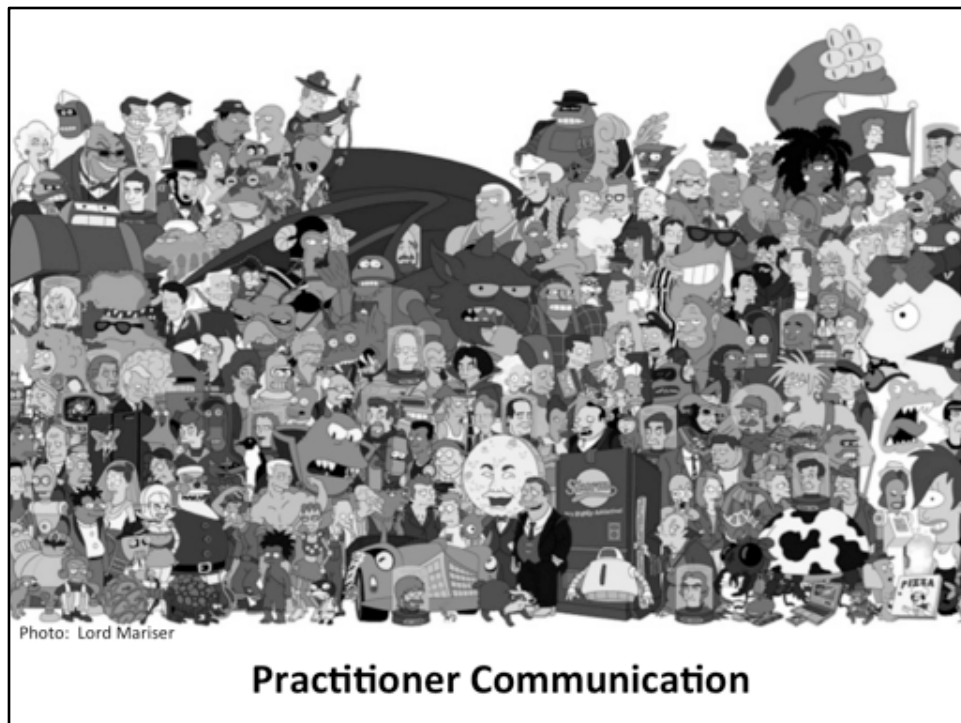
Main audiences are other academics, administrators, and other HCI people

“Insider” language = Insiders often

Each discipline has own “Genre”

Many researchers have a “theme” – what they are or want to be known for

To Convince = use Socratic discussion and argument



Communicating with lots of people from other disciplines, including business people, team members (of other disciplines), engineers, etc.

Have to use OTHER people's language

Judged by people who are not peers

OUTSIDERS

Convince by numbers = ROI



Loss of exposure to corporate data

Lack of understanding the potential benefits of partnering

Restricted research

Lots of exciting things happening in industry – I used to say that almost everything that was really cutting edge was happening in industry, despite the interesting things reported on at CHI.

Student preparedness can suffer

Harder to get internship opportunities for students



[This list is longer NOT because practitioners are more messed up than academics but because as a consultant I've seen more of these things – usually they were things our clients were trying to counteract.]

BIG PRESSURE TO CUT CORNERS, "SATISFICE" (this is a place where having some help from academics would be very helpful)

E.g, Lean UX –evaluating a product with fewer and fewer people – 3 users from 3 different roles

When is lean lean enough?

Waterfall → agile – reps the change

Pressure to make many compromises e.g.,

- cut the N, (illusion that they will take the findings with a grain of salt), (e.g. 3 people in 3 different roles)
- Instead of carefully figuring out who and how to recruit, just recruit friends and family only, do the project in under a week from first talking about it to having the results.,
- sharing undigested findings = abdication of responsibility to analyze all of the data and find patterns. Caveats are forgotten, findings are remembered which makes it very challenging if the preliminary work turns out to be unrepresentative of what you really found.
- Variant: write the executive summary before the analysis

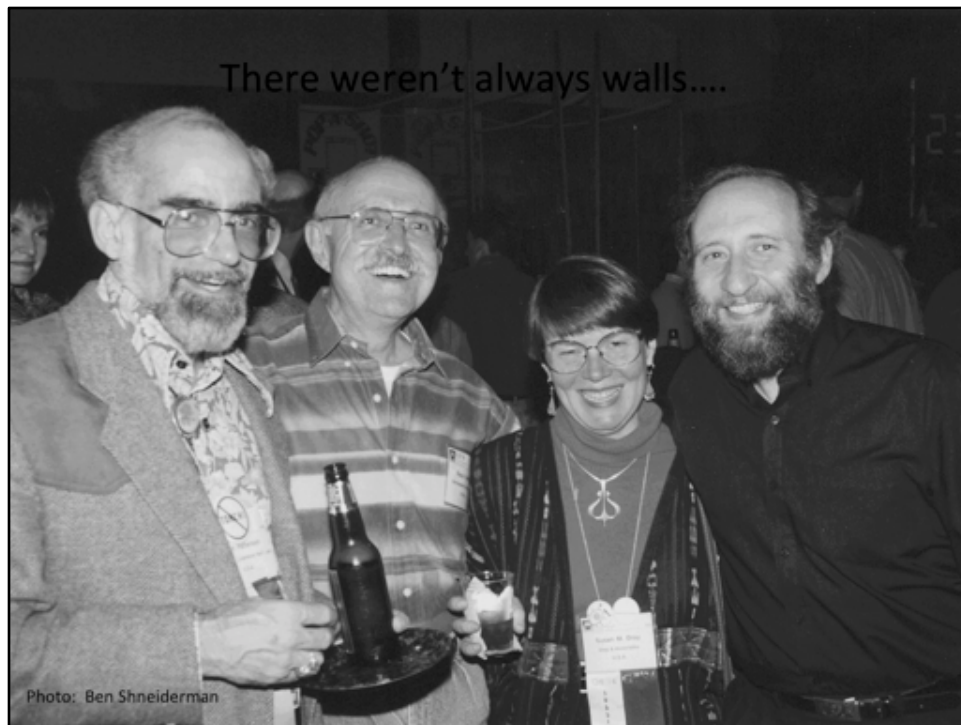


Wall with arrow slits to shoot at each other

Very different types of intellectual activity, work styles, organizational and political dynamics, values that are deep and fundamental → VERY understandable why there are walls

BUT we MUST deal with them

Applied field like Medicine and Biology



Don Patterson (Lawrence Livermore Labs), Raoul Smith (Northeastern), me, Ben (U Maryland)– CHI 94

When CHI was young and small. But more importantly, UNDIFFERENTIATED

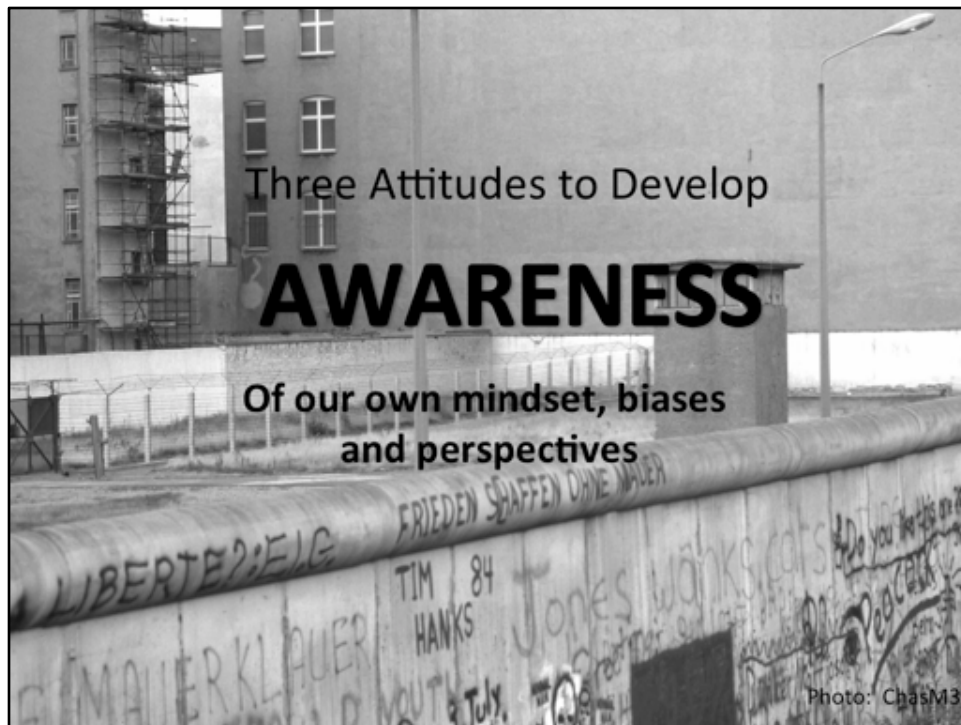
May be true in your country now – but the dynamics are the same regardless of cordiality



CHI 2000 - Ben Shneiderman, Susan Gerhart, Wendy Kellogg, Will Hill, Jakob Nielsen, Jay Bolter, Jack Carroll, Keith Instone



Need to bridge the gap to help practitioners deal with their environment of pressure to water things down too much
AND to balance the academic tendency towards specialization and in its most extreme form, fragmenting knowledge which makes it harder to integrate and use.
We need each others' strategies, rationales, mindsets
So how can we get them?



Let's start with the attitudes (even though we know that attitudes can and often do follow behavior)

(this is the Berlin Wall prior to its fall on November 9, 1980)

Awareness of own biases and perspective

Sometimes we discover these by accident – like those times we say or do something that seems to backfire, despite our best intentions.

We need to pay attention to these “teachable moments” and use them to deepen our own understanding of ourselves

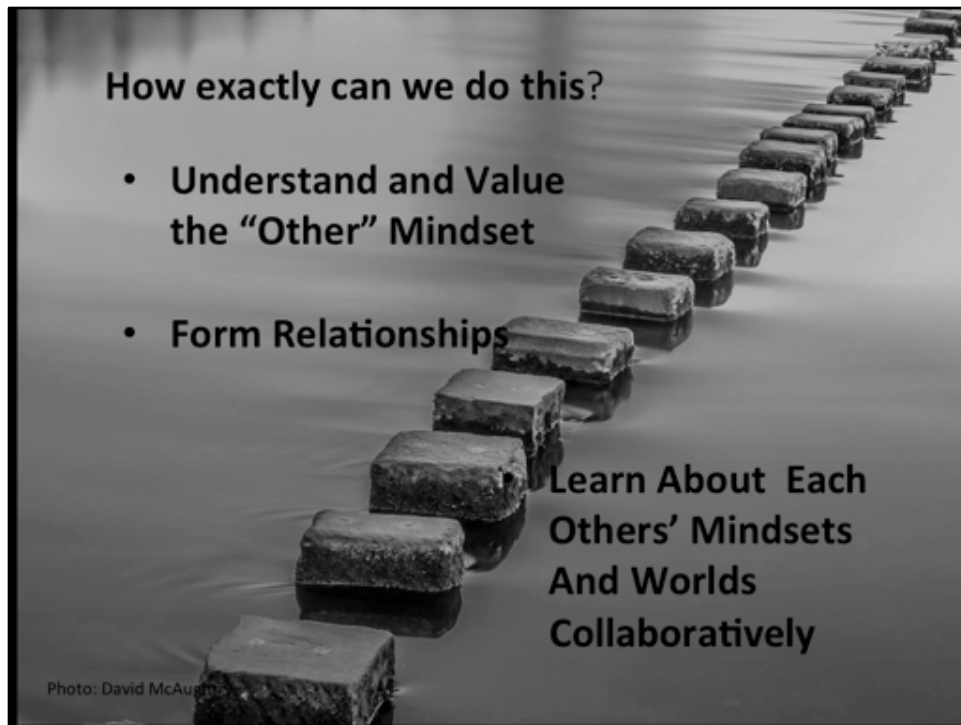
(it is, after all, a continuing process)



(again, the Berlin Wall, this time post-November)
This takes courage when you're doing it the first time



Practice: More rigorous
More ammunition to resist the pressures
Research: Interesting, useful, used



Stepping stones = first step to a bridge

Form relationships and seek to understand their mindsets, perspectives and opinions

To learn more about Business world: Read bz pubs and books, attend bz seminars, link with Bz Schools, Join UXPA

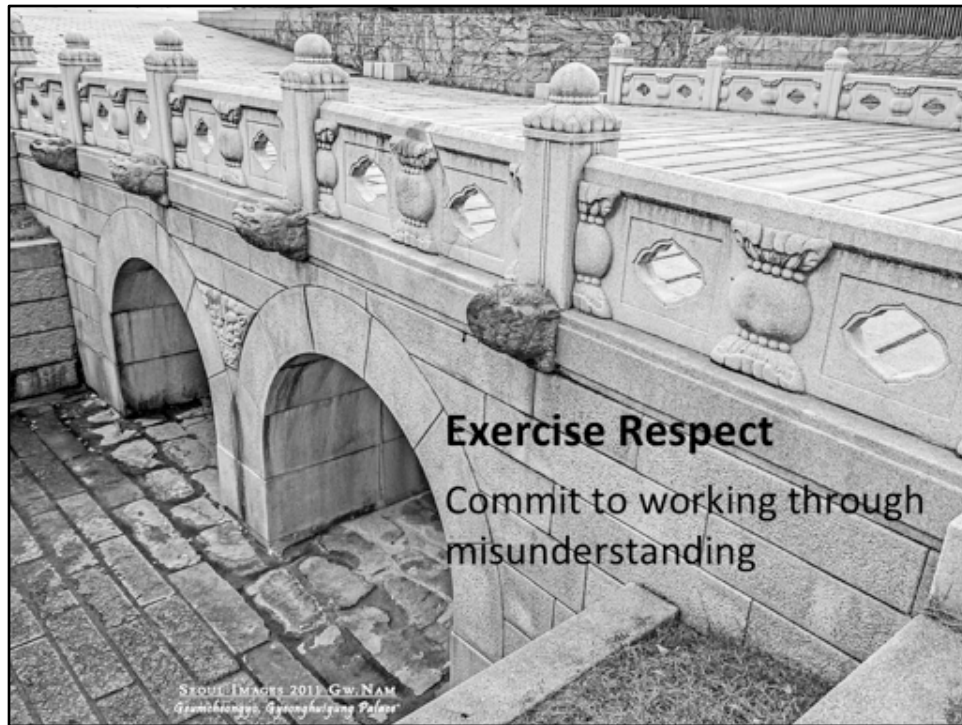
To learn more about academia: Seek out opportunities to invite academics to participate in bz community

ADD UNDERSTANDING OWN



Actively partner on projects

For academics, the “real world” emphasis balance the academic tendency towards specialization and its risks of fragmentation that can make integration and potential application of knowledge much harder



respect



Academics can:



- Offer *practical* evening or weekend classes/training aimed at practitioners
- Sponsor Industry-wide competitions
- Help practitioners build visibility for HCI, usability
- Develop leadership skills and use them in collaborative leadership *with* practitioners
- Write for practitioner-oriented publications showing the relevance of academic research
- Create research institutes aimed at addressing practical and applied problems
- Be inclusive in reaching out to practitioners
- Publish work with practitioners in practitioner-friendly journals (JUS, BIT, IwC)

@susandra

dray.com

Classes: A practical intro to UCD, paper prototyping with exercises, Hands-on intro to usability evals – you can even co-teach

Competitions for best website, application, team project, Academic/practitioner teamwork

UXPA's magazine UX

Your ideas?



Practitioners can:



- Find placements for interns and students in your department or company
- Help determine research agendas by discussing what research would be relevant and useful to you
- Teach students about world of practice
- Seek help with “messy” problems (and listen to it!)
- Model how to work on challenging interdisciplinary teams
- Work to influence people outside of HCI in your company about the value of working with Academics
- Mentor students
- Help find corporate sponsors for academic projects
- Work on projects together
- Write articles together for internal publications

@susandra

dray.com

Teach course in practical methods, etc.

Discuss WITH ACADEMICS their research agendas

****** Seek help with messy problems – particularly valuable. I’ve done this a number of times and it has been incredibly helpful (You know who you are)



These can be found at:
<http://www.dray.com/building-bridges/>
Or pick up a paper copy

@susandra

dray.com



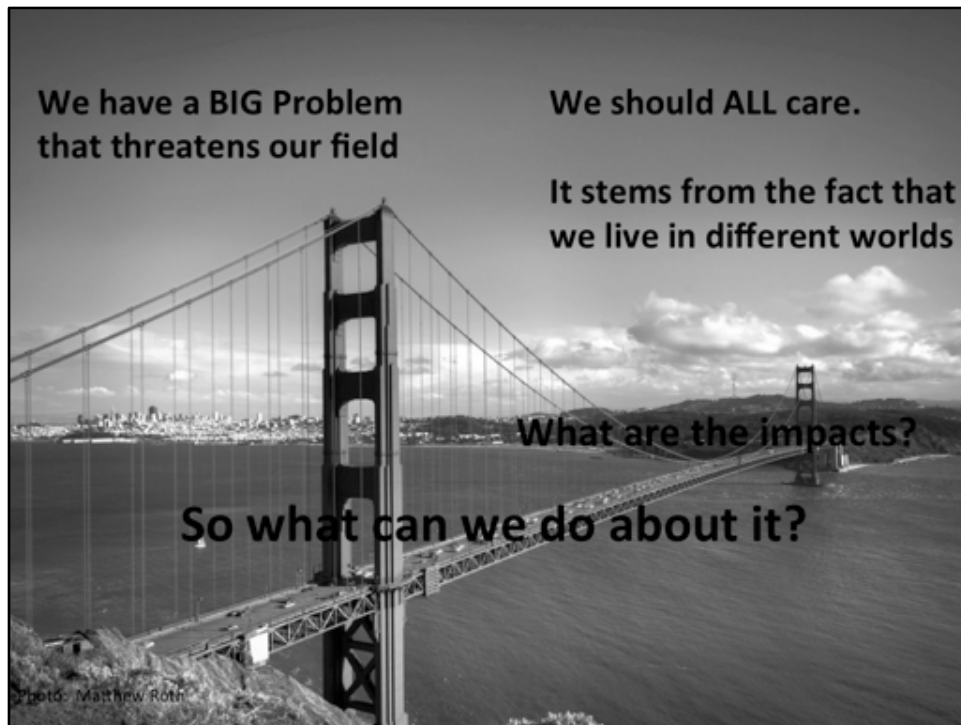
Even missteps – reinforce the relationships
And HAVE FUN together!
Celebration can be big like this



Or small like this one that Sara Bly and I did as the “Humane Interface” at CHI85 and 86 where we gave individual gag gifts to everyone on the conference committee. Of course, it was tiny compared with today’s committees/



This doesn't happen overnight
There are lots of pressures driving us apart so we have to commit to the long term
and keep going even if things get rocky



This is the “Tell ‘um what you told ‘em” slide. We covered these things today. I hope you share my sincere hope that we can find better ways to work together to bring down the walls between our respective worlds. It WILL make our work more relevant, more enjoyable, more impactful. I know this because I’ve seen what can happen with strong academic/industry partnerships. Another way to say it is that...



(I particularly like this phrase)



If the USER can't use it,
It doesn't work!

If the Academic can't use it
AND/OR
If the Practitioner can't use it,
We're not there yet!

Now before you jump out of your seats, this is for those of you who find it easier to remember things from more artistic means...



Super Bridging Style Bridging Style

We really have a problem
for between us there's a wall
And it doesn't hurt just one of us,
it really hurts us all
This problem is longstanding
And it's not unique to us.
But we really need to fix it
And without a great big fuss

[illegible]