We often fail to foresee the consequences of our social computing designs.
One explanation: it can’t be foreseen.

Interdependence and collective action remain challenging

The result-algorithmic, workflow-based architecture contains collaborations so globular and unpredictable that, if they can be entirely quantified and pre-defined, but many valuable collective activities do not fit this criteria.

Cold start problem

The problem: the social computing system isn’t really very enjoyable or useful to anybody when nobody’s there yet.

... but then, why would someone join and start populating it if there’s nobody there?

The entire effort struggles to hit critical mass, like how a car engine on a freezing day can’t start up because it’s too cold, and if it can’t start up, it can’t warm itself up to start. Thus: a cold start problem.

Why? Social proof.

Why? Because you never know where things will go...

So it’s deterministic?

Further randomize each participant into one of eight possible parallel “worlds” where the download counts all start at N.

OK, here’s a picture of a woman in her twenties breast-feeding a strange boy.

FINE. Age can only infinity.

Can then want the line between 10 infant at 100 days old?

if it looks big enough to walk on it.

But the WHO says to breastfeed at least partially until two years.

NOPE. (>“)”
Another explanation: we can design

Defaults influence norms
Very few users change defaults: only 5% of Microsoft Word users in one study had ever changed any settings [Spool 2011]
Why? Recall Channel factors. (Amongst other reasons.)
We don’t readily distinguish between socially enforced norms and default enforced norms. Is public-by-default a social norm?
Think about the defaults you encounter in social computing systems
Who do you share with by default on Facebook?
What’s the default sort order of posts?
What’s the default skin color of emoji?

Work required to overcome stalling and friction [Salehi et al. 2015]
Deliberative publics require special action to preserve their momentum. Example behaviors include:
- debates with deadlines
- act and undo
This labor could not have been written into software: it consists of human scripts undertaken by moderators or trusted others.

Design and the Media Equation
Very few social cues from the system are required to prompt an automatic social response from people.
(Tread carefully!)
…but what happens when we try to increase the number and fidelity of the cues?

Designs for strong ties
Often, the design goal is to maintain or deepen the strong tie relationship.
Other examples?

Moderation’s result
It works.
Moderating content or banning substantially decreases negative behaviors in the short term on Twitch. [Seering et al. 2017]
Reddi’s ban of In/CoonTown and Imlatpeople hate due to violations of anti-harassment policy succeeded: accounts either left entirely, or migrated to other subreddits and drastically reduced their hate speech. [Chandrasekharan et al. 2017]

Beyond being there
[Hollan and Stornetta 1993]
“Being there” is the wrong goal.
We will never fully recreate the face-to-face experience. There are too many subtle cues for us to fully model or recreate them, even with hypothetical future technology.

Network lag; immersion and comfort issues in VR, lack of shared physical context, …
So, stop trying.
What I hope you take away

That every social system is designed, either explicitly or by default.

That designs can have substantial — but not complete — influence over the behaviors in that system.

That, as socio-technical systems, those designs require a combination of computation and of structured human behavior to succeed.

That we have many tools in our toolbox to help us create enlightening, fun, or meaningful spaces.
Creating bustling spaces rather than ghost towns
Designing norms and culture
Bootstrapping and prototyping
Growth and breadth
Designing for strong and weak ties
Group collaboration

Wisdom of the crowd
Crowdsourcing and peer production
Antisocial computing: mobs and trolls
Moderation
Collective governance
Misinformation
AIs in social environments
How can we design the social systems that we inhabit?

Thanks!
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