

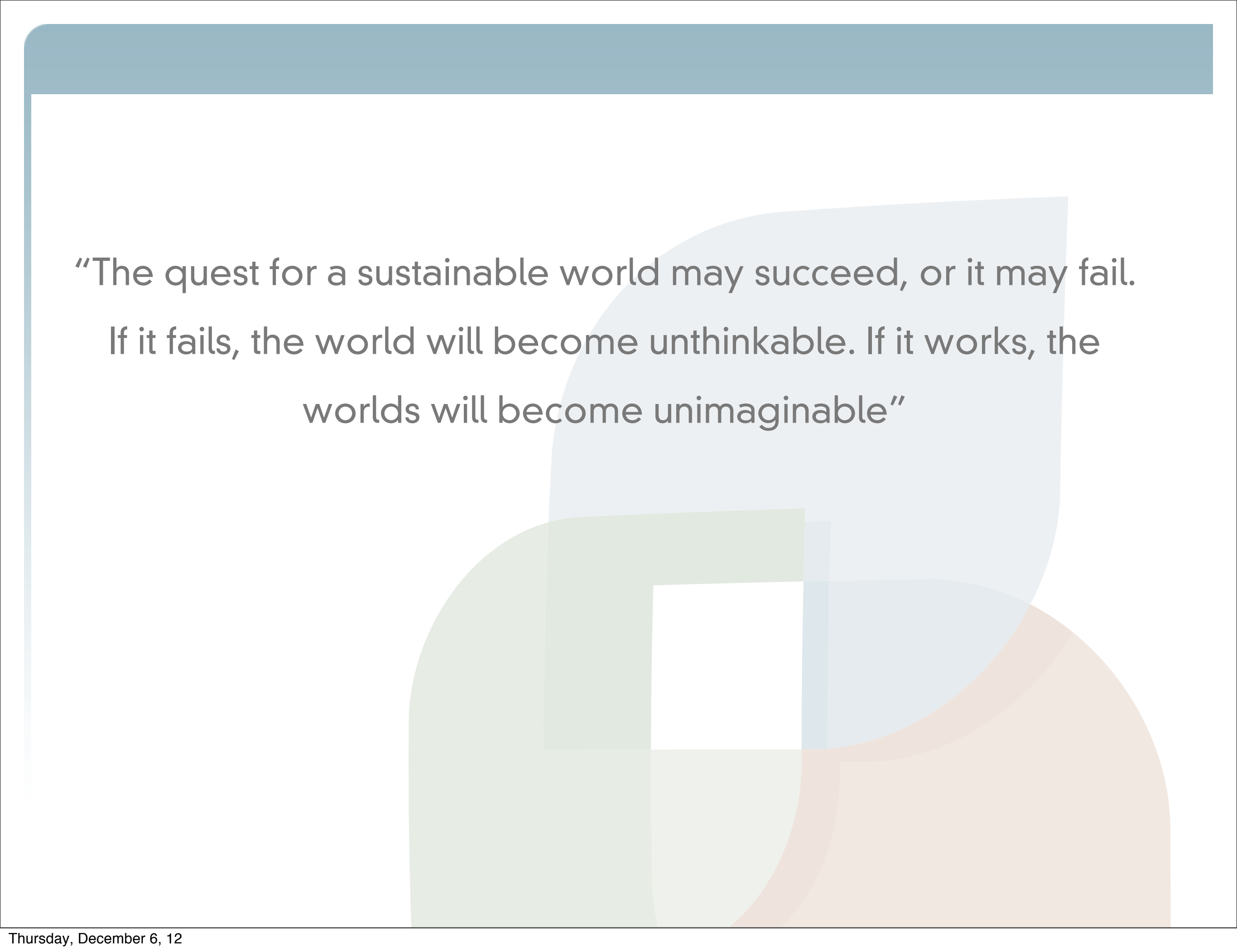
User Interaction: How does human-object interaction change with techno-culture

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INF 133 Fall 2012



An abstract graphic consisting of several overlapping, semi-transparent shapes. At the top is a solid blue horizontal bar. Below it, a large light blue shape with rounded corners overlaps a green shape with rounded corners, which in turn overlaps an orange shape with rounded corners. The word "Review" is centered in the upper part of the light blue shape.

Review

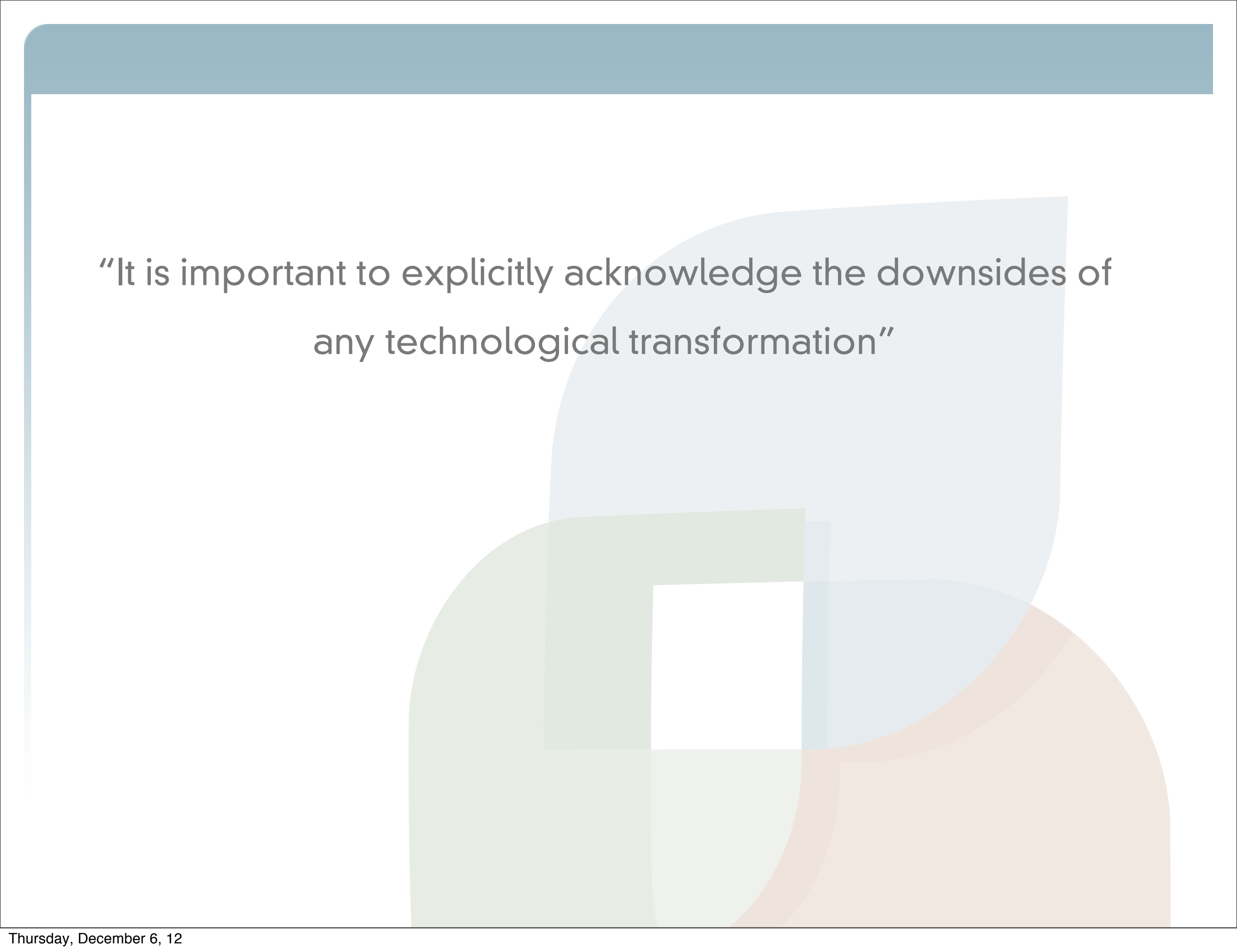


“The quest for a sustainable world may succeed, or it may fail.
If it fails, the world will become unthinkable. If it works, the
worlds will become unimaginable”



“Effective intervention takes place not in the human, not in the object but in the realm of the techno-social”

OBJECT	TECHNOSOCIAL EPOCHS	PEOPLE
LINE OF EMPIRE ARTIFACT		HUNTERS AND FARMERS
LINE OF NO-RETURN MACHINE		CUSTOMERS
BOX OF GMO CORN MONSANTO WHEAT	PRODUCT GITMOS	CONSUMERS
WORDPAGE CLOUD-COMPUTING? DIGITAL MUSIC MEDICAL HISTORY PRINT-OUT	SPINE [WINE]	END-USER
DOWN FROM 3D → BKT → 2D DATA → OBJECT → REPRESENTS	BIOT	WRANGERS



“It is important to explicitly acknowledge the downsides of any technological transformation”



“Tomorrow composts Today”



“Cognitive load and opportunity costs”
Spime designers design for these

New stuff





“Metrics make things visible”
“Spimes begin and end as data”

“When the entire industrial process is made explicit, when the metrics count for more than the object they measure, the gizmos become spimes.”

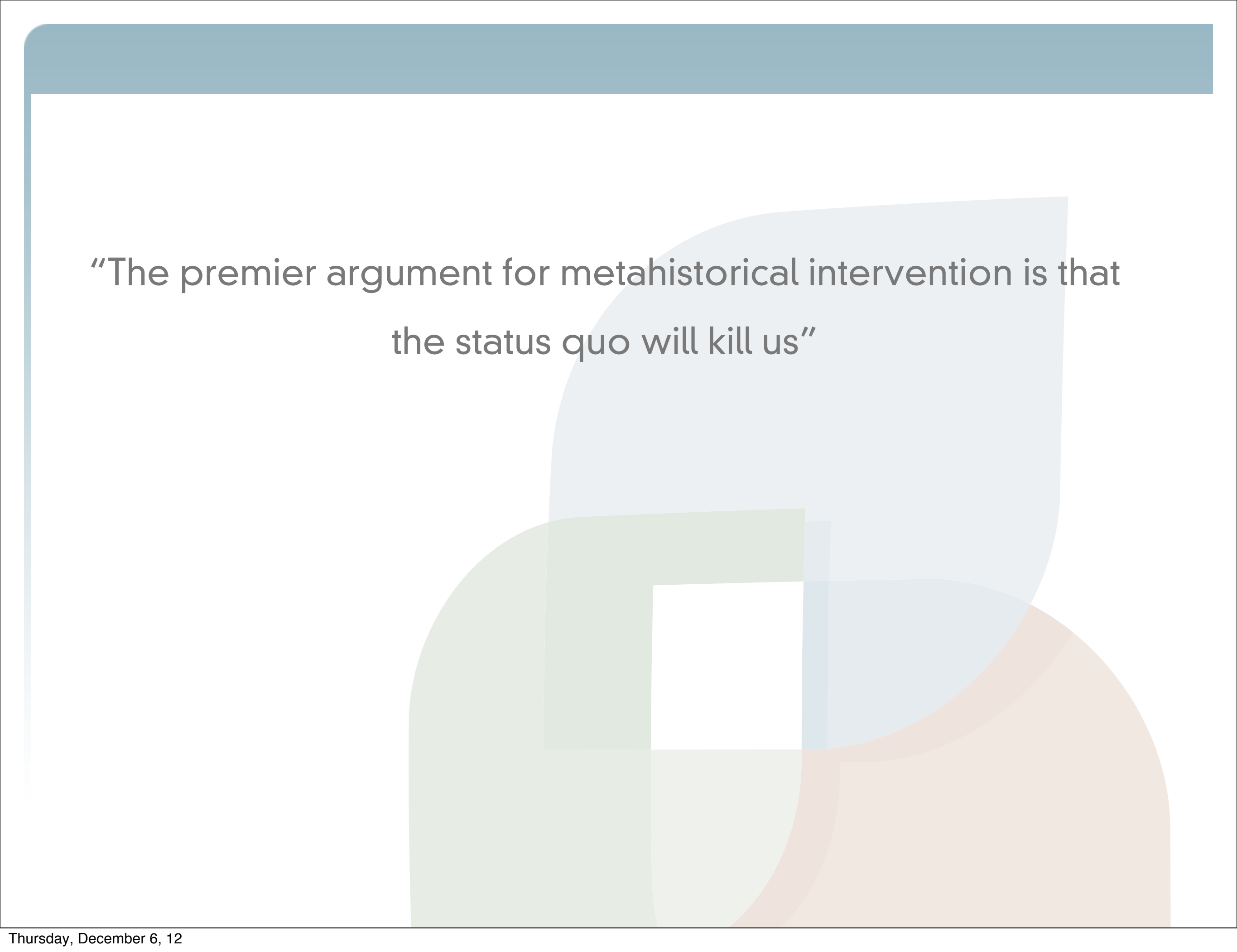
Domino's Example



“How do people know what to expect from their things?”



“metahistory is the ultimate determinant of the shape of things”



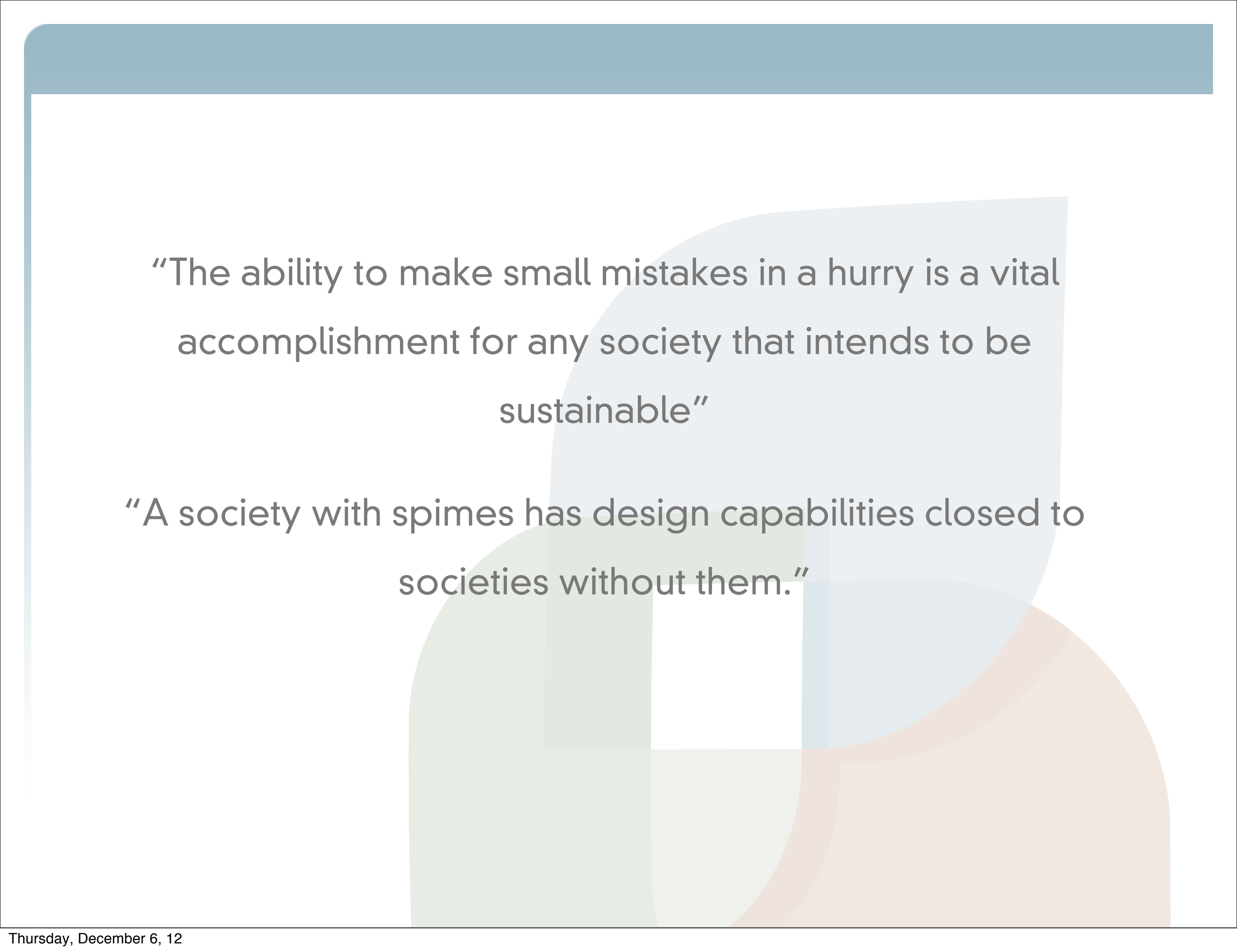
“The premier argument for metahistorical intervention is that
the status quo will kill us”

New stuff

Air Emergency: Beijing

NOV 1 2011, 12:35 PM ET





“The ability to make small mistakes in a hurry is a vital accomplishment for any society that intends to be sustainable”

“A society with spimes has design capabilities closed to societies without them.”

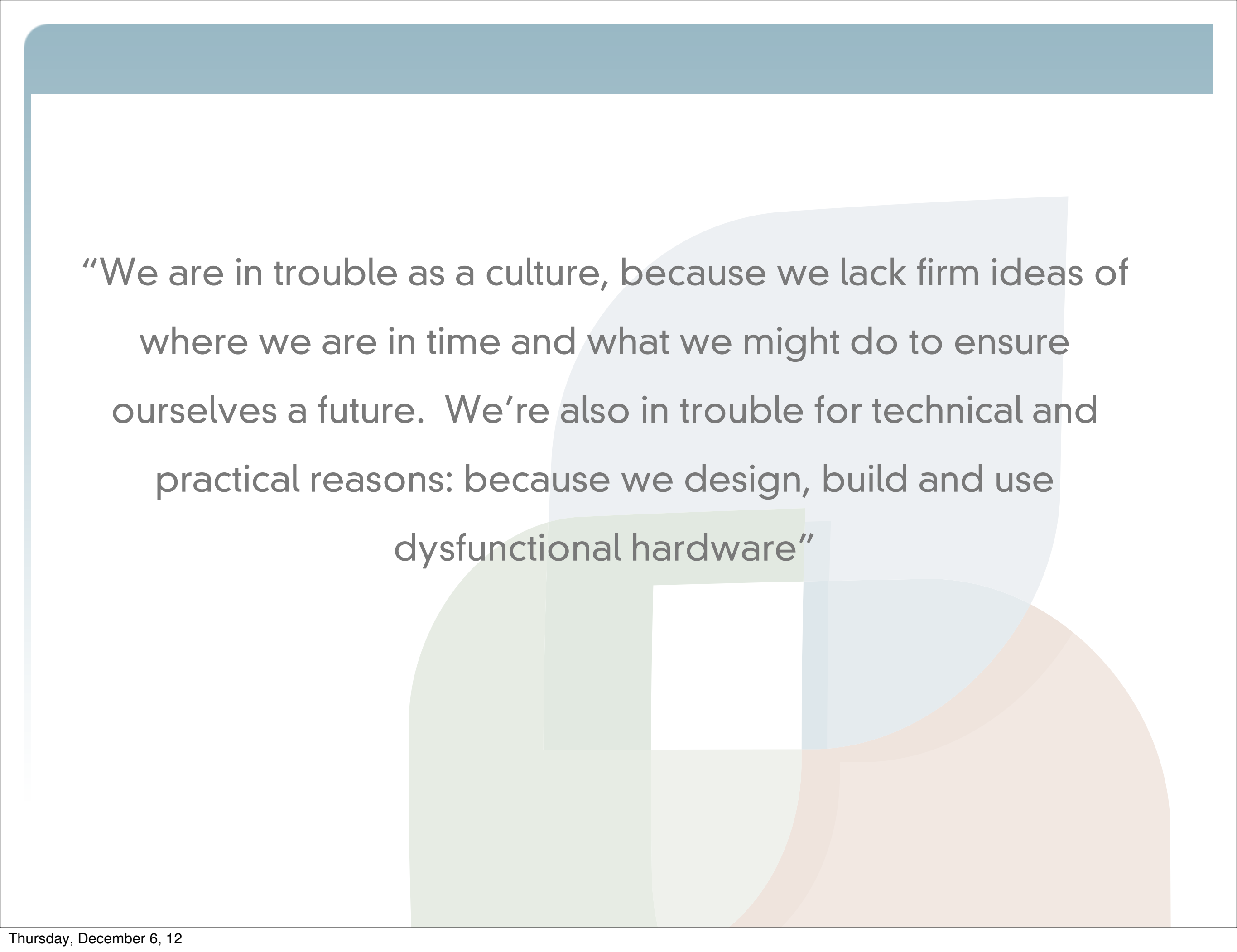


“The values of a synchronic society are temporalistic:
Do we gain more time by doing this or less time?”



“Temporalistic thinking is a moral worldview”

“A society with declining life expectancy is clearly retrogressive. A society with a high infant mortality rate is maladjusted. A society riddled by plagues, diseases, resistant and emergent microbes and environmental illness is decadent.”



“We are in trouble as a culture, because we lack firm ideas of where we are in time and what we might do to ensure ourselves a future. We’re also in trouble for technical and practical reasons: because we design, build and use dysfunctional hardware”



The Rubbish Makers 7



The Rubbish Makers 7

“Animals can’t design. Apes will fling objects, but humans will throw objects, practice throwing them and refine the grain of the material so that the thrown object throws better....

Humans get far better at interacting with objects than any animal can ever manage; and since humans are also capable of abstract analysis; they are also better at getting better.

Humans have technosociety.”

“Entropy requires no maintenance”



“Entropy requires no maintenance”

“Pollution is not subject to consumption”



“Entropy requires no maintenance”

“Pollution is not subject to consumption”

“Pollution tends to persist while the useful tends to wear out”



“Entropy requires no maintenance”

“Pollution is not subject to consumption”

“Pollution tends to persist while the useful tends to wear out”

“Trash is always our premier cultural export to the future”



“We don’t consume waste”

Shaping Things

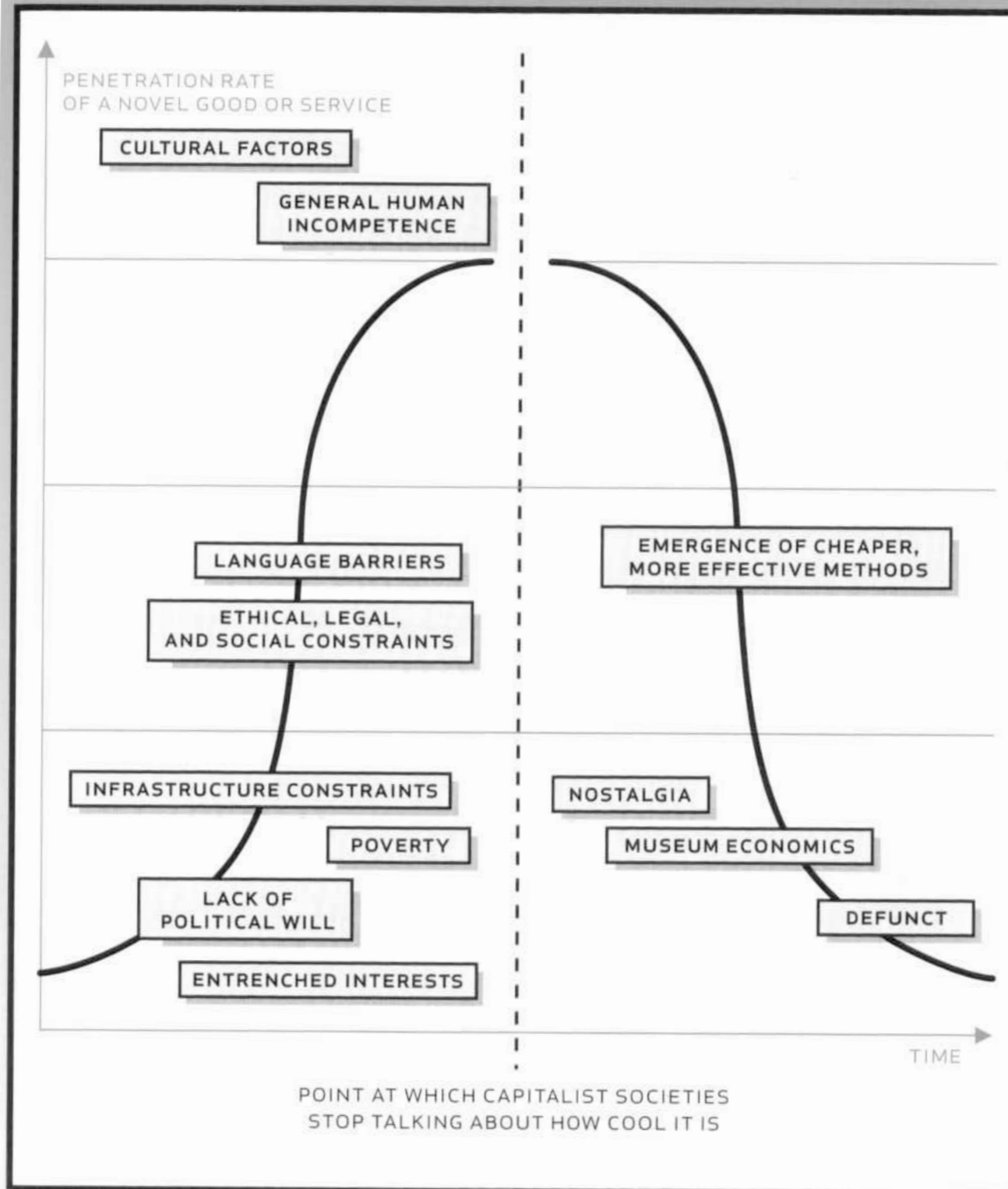


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OBSOLESCENCE IS INNOVATION IN REVERSE

"The Mirrored S-Curve of Technological Adaption"

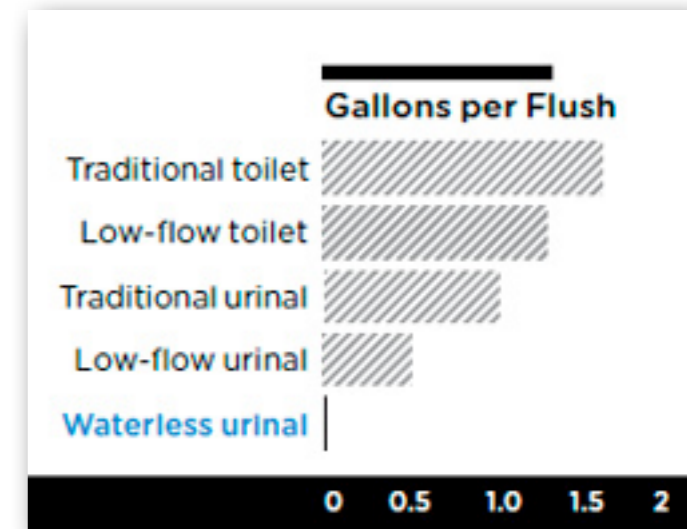




How do things move along this curve?

“It isn’t magic. People do it. Some people are better at it than others”

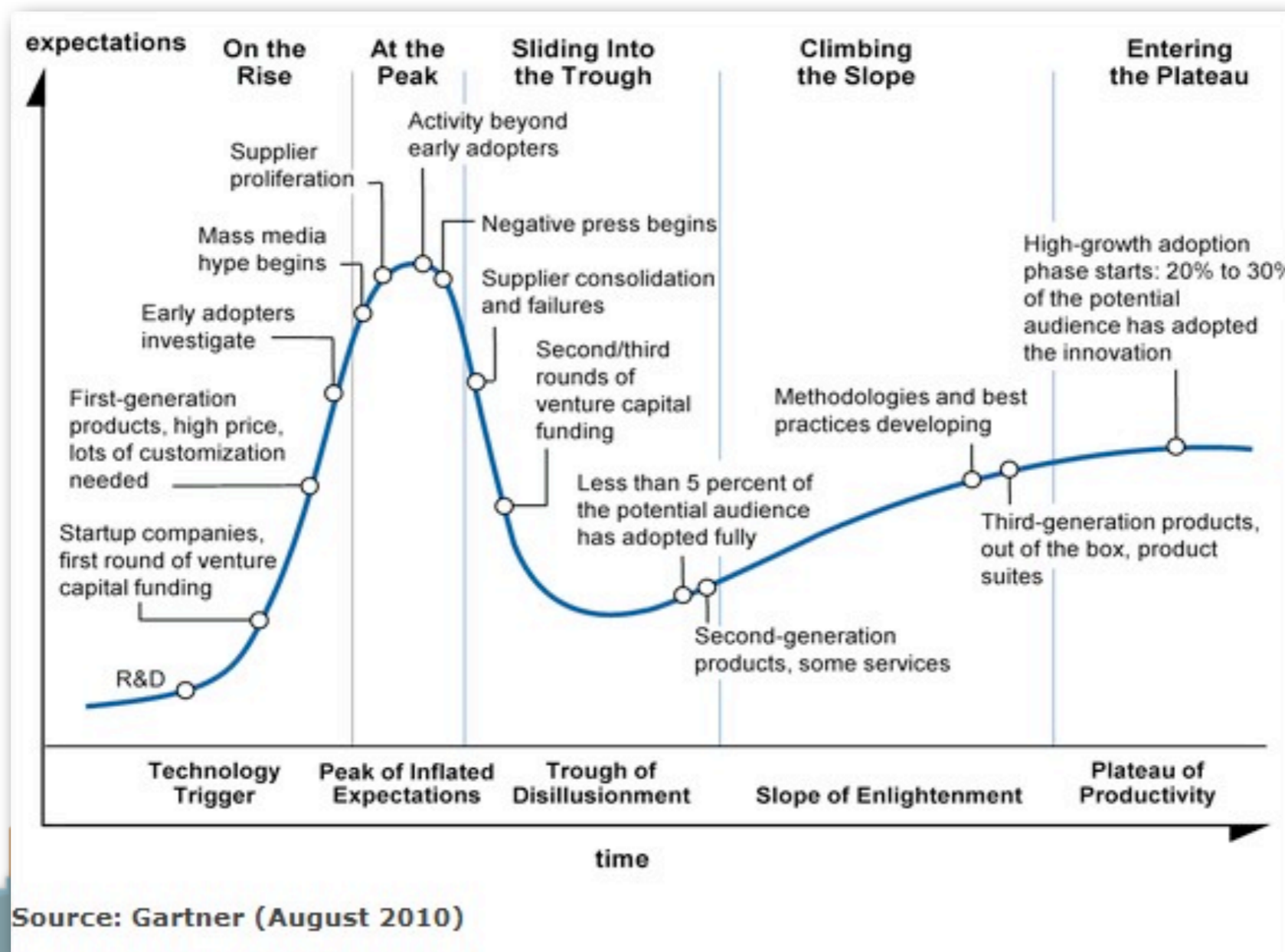
Shaping Things



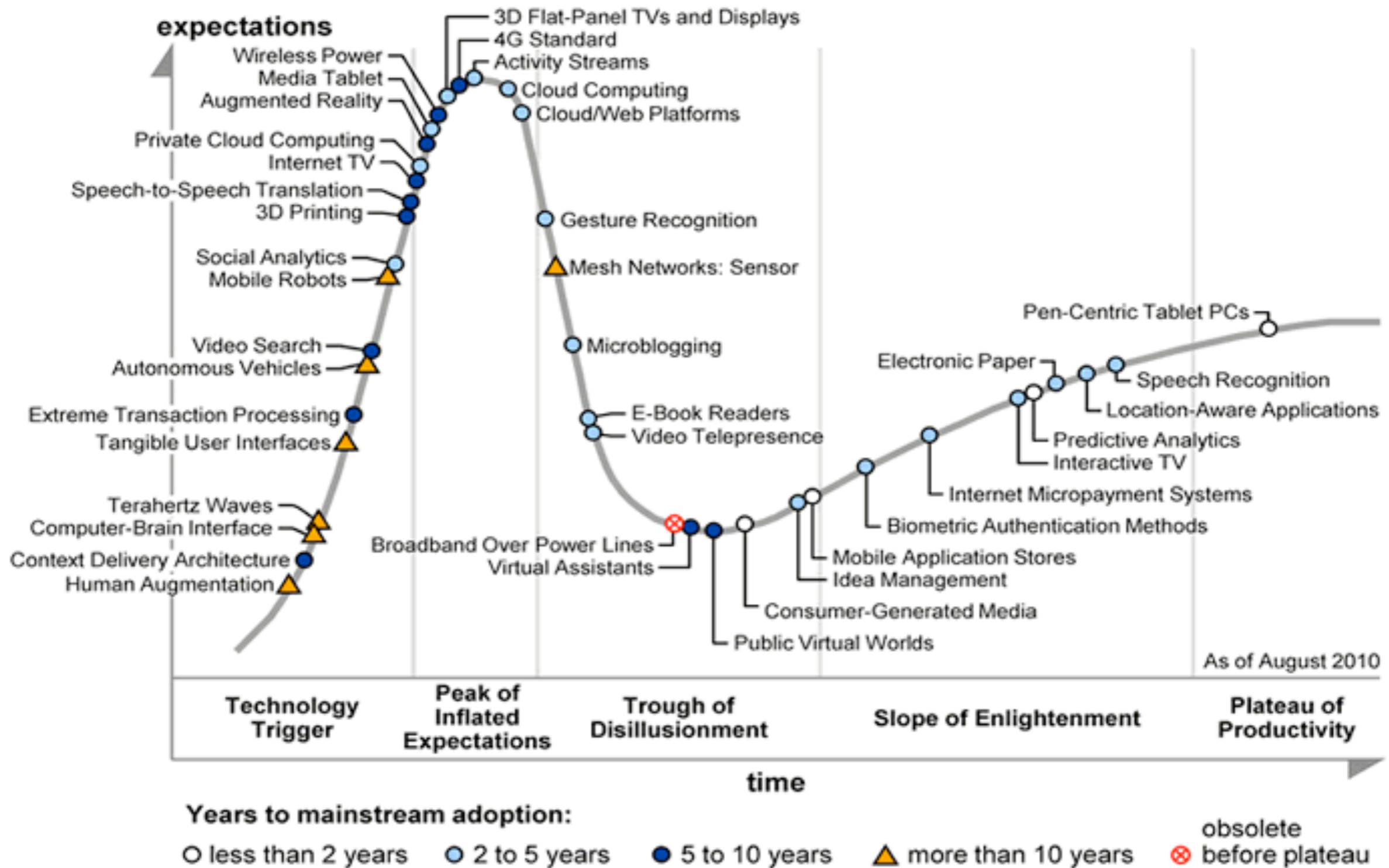
http://www.wired.com/magazine/2010/06/ff_waterless_urinal/all/1

Shaping Things

“Gartner’s Hype Cycle characterizes the typical progression of an emerging technology, from over-enthusiasm through a period of disillusionment to an eventual understanding of the technology’s relevance and role in a market or domain. Each phase is characterized by distinct indicators of market, investment and adoption activities.”

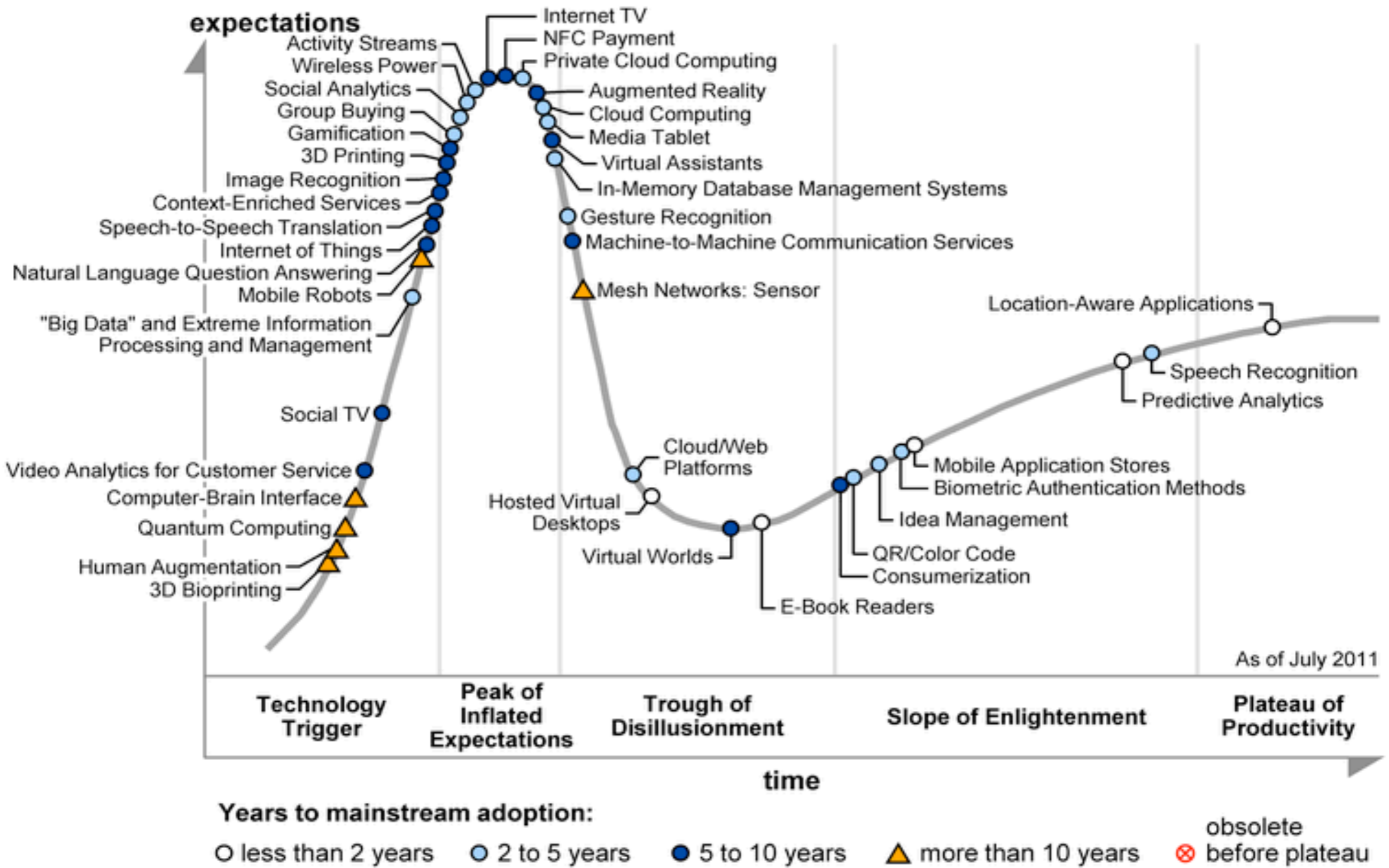


Shaping Things



<http://www.gartner.com/it/page.jsp?id=1447613>

Shaping Things



<http://www.gartner.com/it/page.jsp?id=1447613>

Shaping Things



Shaping Things



“Most Advanced, Yet Acceptable”



“being designery”



Shaping Things

“an absolutely acceptable object would be invisible”



Shaping Things

“a thing is not merely a material object, but a frozen techno-social relationship.”



“Most Advanced Yet Acceptable”



Shaping Things 9

“ On eBay [and Amazon] it’s now common to find objects for auction for a penny. I can have that object for a penny, because the point was to inveigle me into the auction process and a relationship with the auctioneer. If i’m given something for free, in a GIZMO-End User situation, then I need to be warily aware that this is almost certainly a loss leader of some kind meant to lure me into some tangled production chain.”



Shaping Things 9

“ I’m not supposed to worry my pretty little head about any of that, but you know something? I know that I am paying for it somehow. Those phenomena do impinge on me: legal, social, ethical, environmental, all of them... They should inform my decision about whether I buy that bottle and integrate its contents into my body.”



Shaping Things 9

“My relationship to this bottle of wine is a parable of my human relationship to all objects.”



Who is able to expose all these externalities in a way that is Most Advanced Yet Acceptable?



Designers



“A SPIME is by definition, the protagonist of a documented process. It is an historical entity with an accessible, precise trajectory through space and time”



Shaping Things 10



IoT

- GPS enabled monitors
- Global Network
- What does the design of a system that is aware of most things at all times look like?
 - Wranglers
 - Inventories
 - The lifestyle magazine as a dynamic socio-technical infrastructure



Spime

- What happens when “The model is more detailed than the physical object it models.”
- De novo
- Reverse Engineered
- Interaction effects
- SPIME monitors++
- Intellectual property



“It may not seem that I “need” all that information, but that’s an old-fashioned way to think. I don’t “need” every web page on the internet, either.

It’s not a question of designing an internet of things to meet my so-called “needs.”

It’s vastly cheaper and simpler just to enable automatic information-generating devices and processes, then search them mechanically and cybernetically, to figure out what I “need.”



Fabbing • fabricators will disintermediate the product and gizmo worlds



Money

- Gold
- Paper money backed by gold
- Paper money not backed
- Electronic money
- Credit History

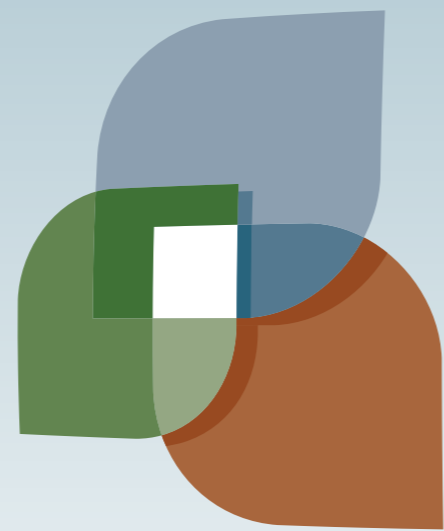


Pulling it all together • Problem



“The only sane way out of a technosociety is through it, into a newer one that knows everything the older one knew and knows enough new things to dazzle and dominate the denizens of the older order. That means revolutionizing the interplay of human and object. It means bringing more attention and analysis to bear on objects than they have undergone. It also means engaging with the human body and its affordances, with our health and our ease and our comfort, with our working environment, with our lungs and our skin and our bones.”





L U C I

