

User Interaction: How does human-object interaction change with technoculture

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Shaping Things

“New forms of design and manufacture are appearing that lack historical precedent”

“Our current scale/methods of manufacturing and consumption are not sustainable”

Shaping Things

“Effective intervention takes place not in the human, not in the object, but in the realm of the technosocial”

Human Computer Interaction duality



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What are Sterling's technosocial epochs?



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What separates epochs?

Shaping Things

What separates epochs?

“We know that this revolution has become the new status quo when even the fiercest proponents of the earlier technoculture cannot physically overwhelm and defeat the new one”

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

Shaping Things

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

“Tomorrow composts today”

Shaping Things

“What can you no longer earn a living without?”

“What technological feature would a country be completely conquerable if they lost it?”



Shaping Things

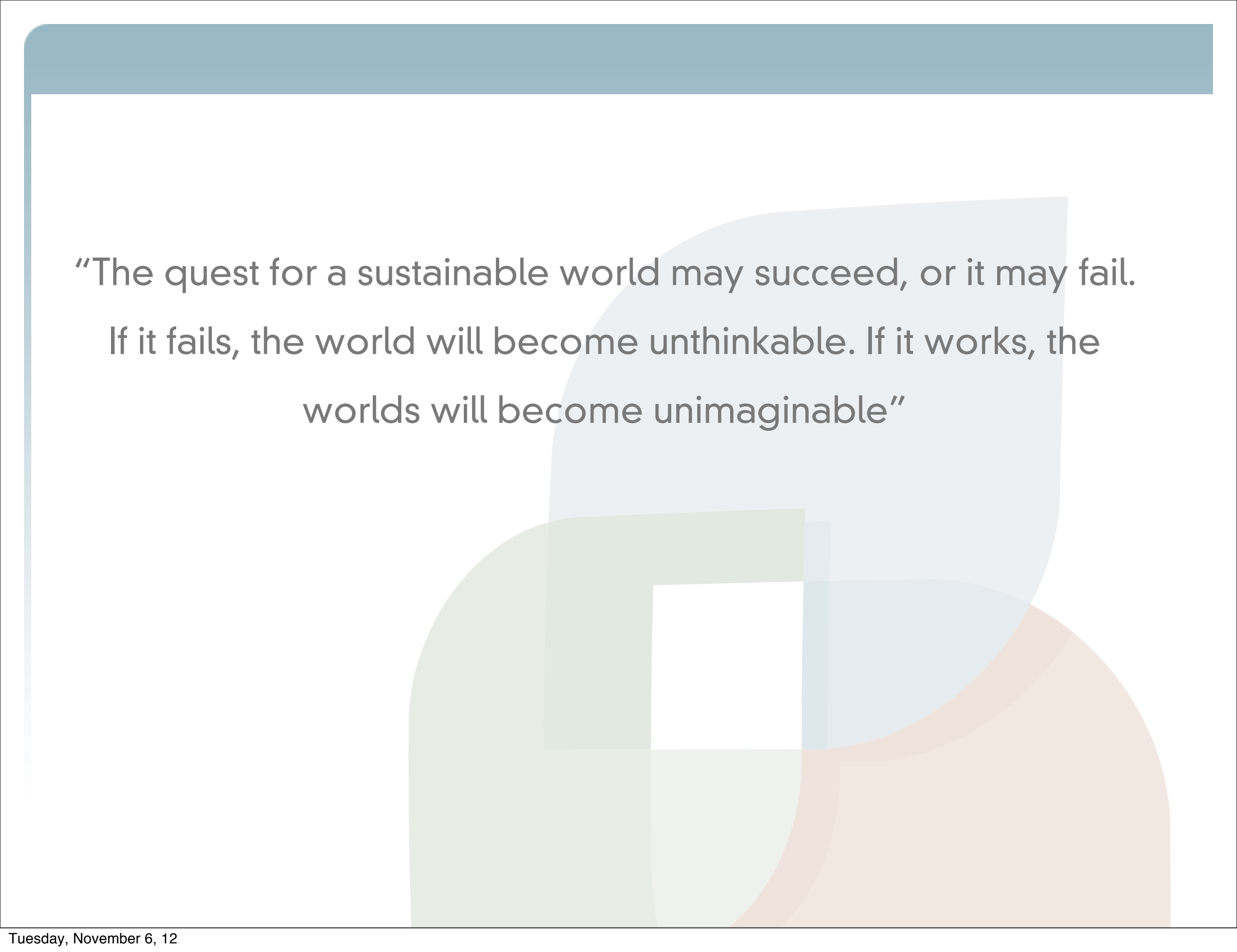
Designers in a GIZMO world must design for
cognitive load and opportunity cost

"...in an information-rich world, the wealth of information means a dearth of something else: a scarcity of whatever it is that information consumes. What information consumes is rather obvious: it consumes the attention of its recipients. Hence a wealth of information creates a poverty of attention and a need to allocate that attention efficiently among the overabundance of information sources that might consume it" (Simon 1971, p. 40-41).

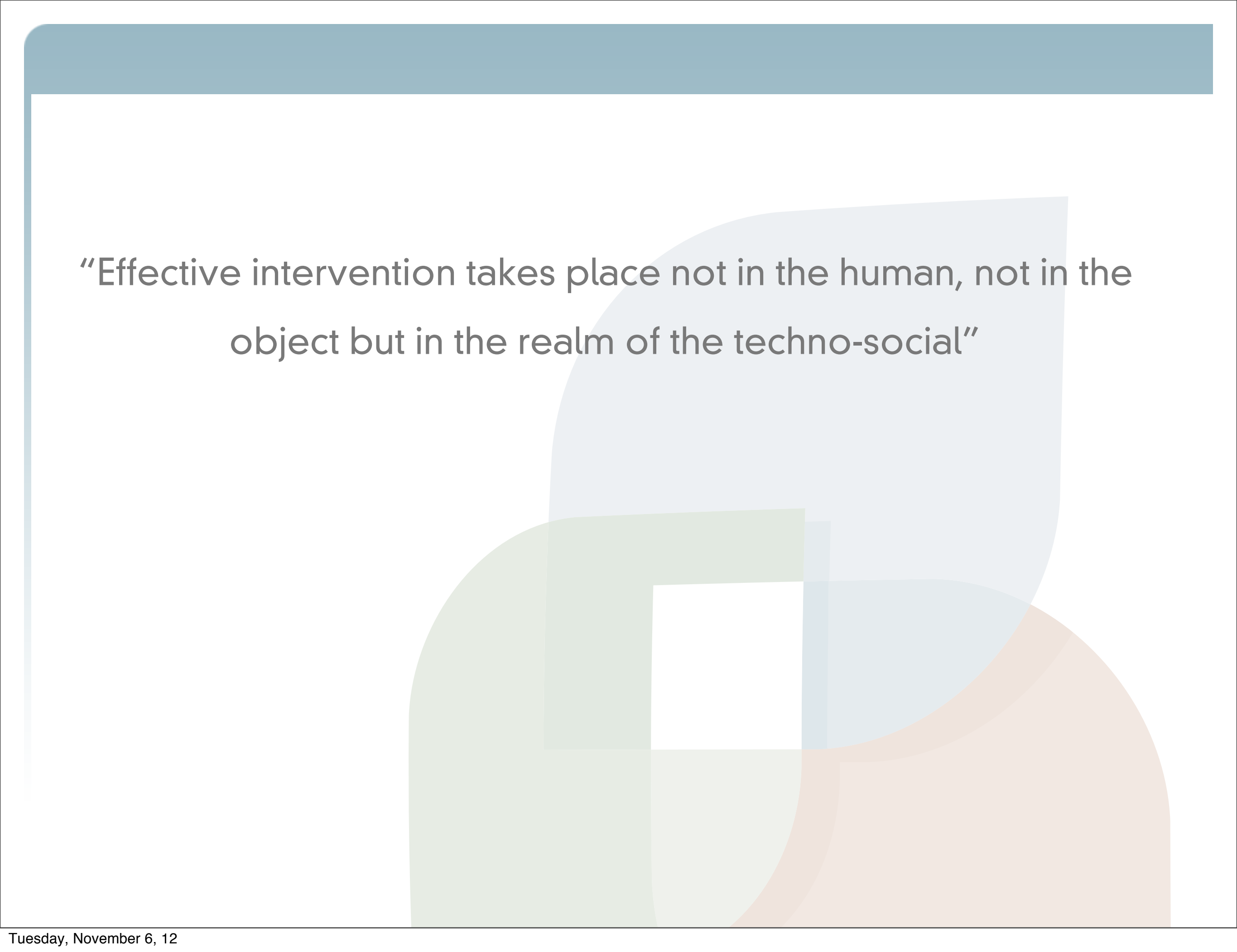
“Designing an object to be simple and clear takes at least twice as long as the usual way. It requires concentration at the outset on how a clear and simple system would work, followed by the steps required to make it come out that way -- steps which are often much harder and more complex than the ordinary ones. It also requires relentless pursuit of that simplicity even when obstacles appear which would seem to stand in the way of that simplicity.”

T.H. Nelson, 1977

Humans are limited in their capacity to process information.
This has important implications for design.

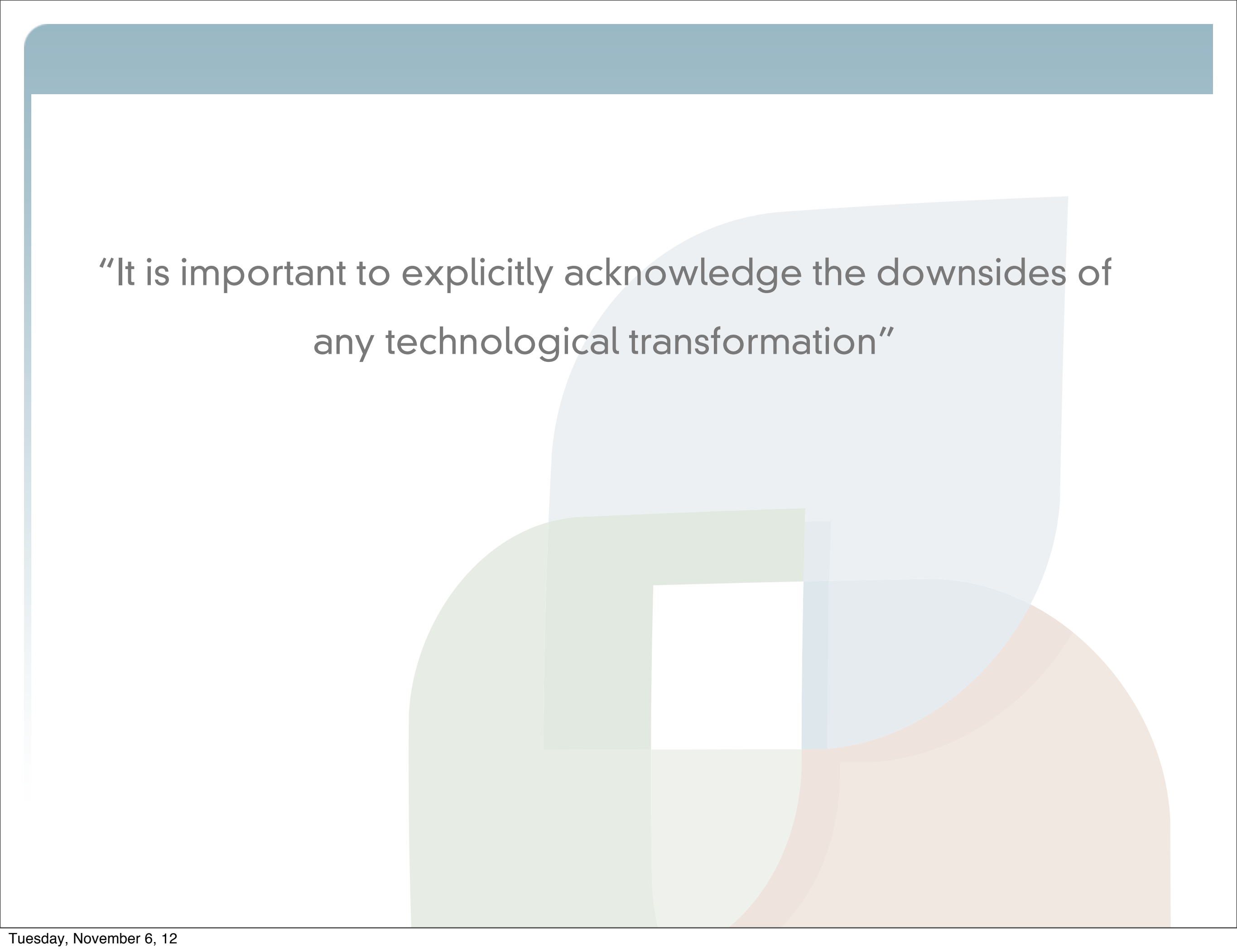


“The quest for a sustainable world may succeed, or it may fail.
If it fails, the world will become unthinkable. If it works, the
worlds will become unimaginable”



“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 GIZMOS	CONSUMERS END-USER
WEBSITE CLOUD-COMPUTING? DIGITAL MUSIC MEDICAL HISTORY PRINT-OUT DOWN FROM 3D → BUILT → 2D MODEL DATA → OBJECT → REFERENCE	SPINE [WINE] BIOT	WRANGERS



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

A decorative header bar in a muted teal color spans the top of the page. The background features three large, overlapping, semi-transparent shapes: a light blue shape at the top right, a light green shape at the bottom left, and a light orange shape at the bottom right. These shapes overlap in the center, creating a white square void.

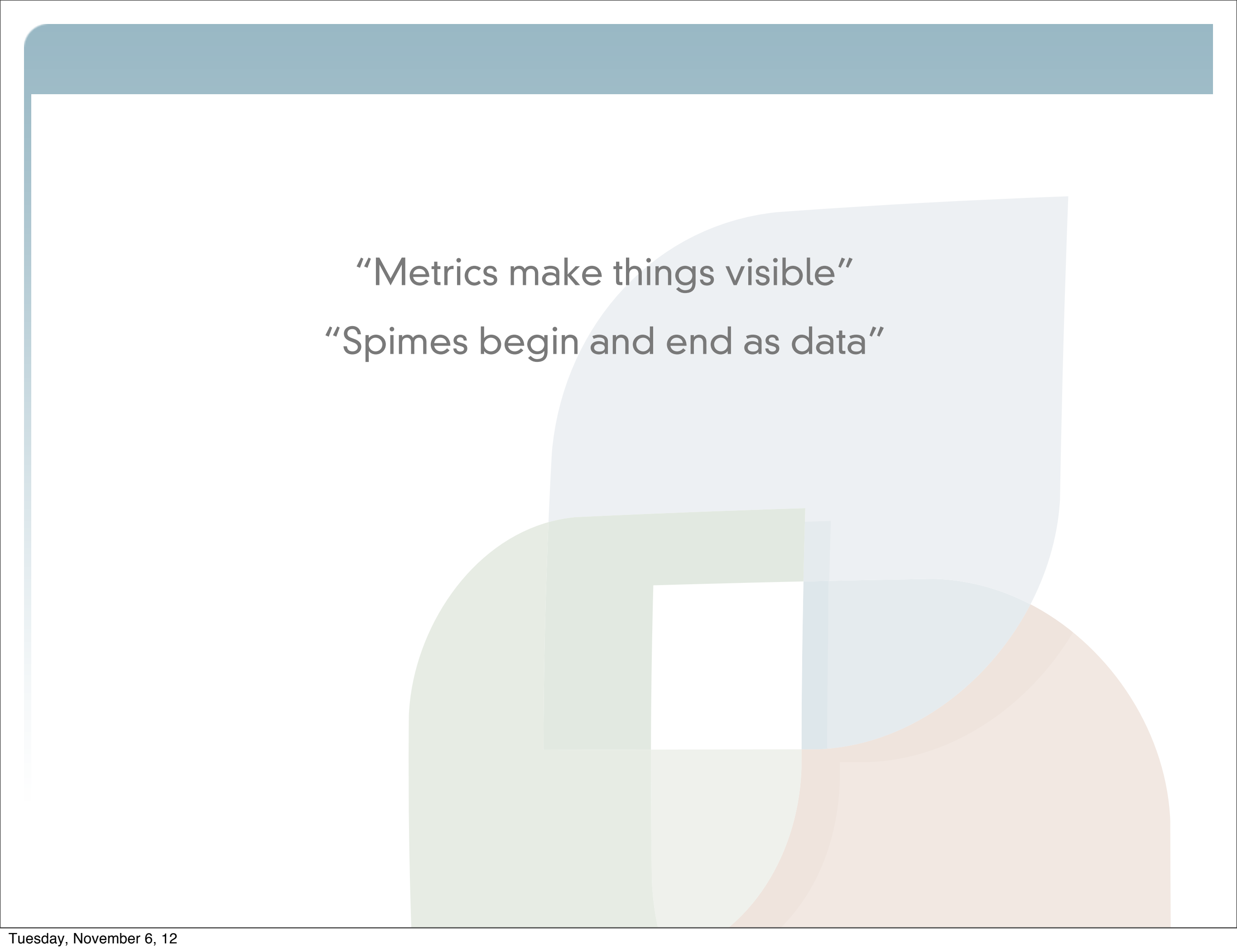
“Tomorrow composts Today”



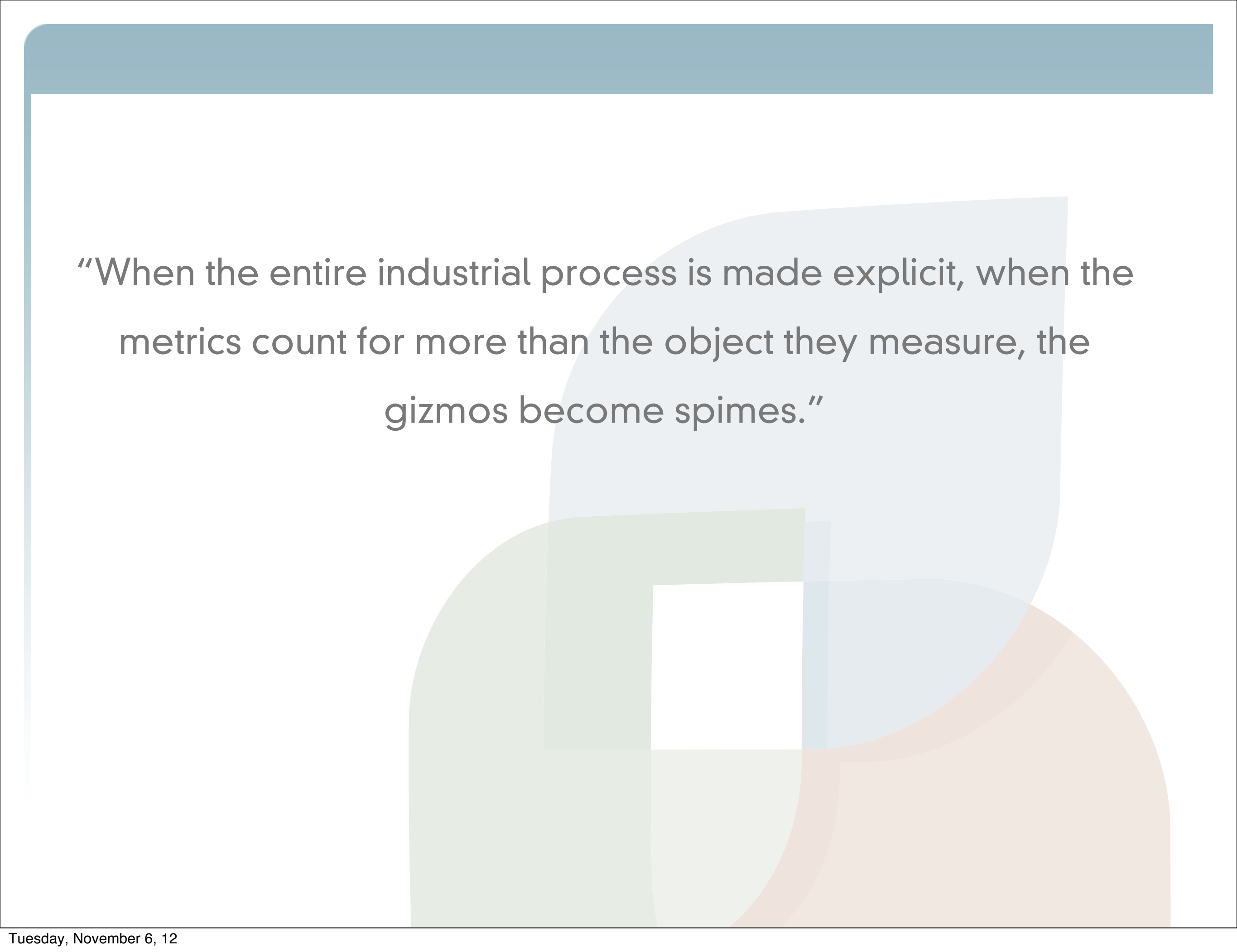
“Cognitive load and opportunity costs”

Spime designers design for these

How does this play out in the wine bottle example?



“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.”



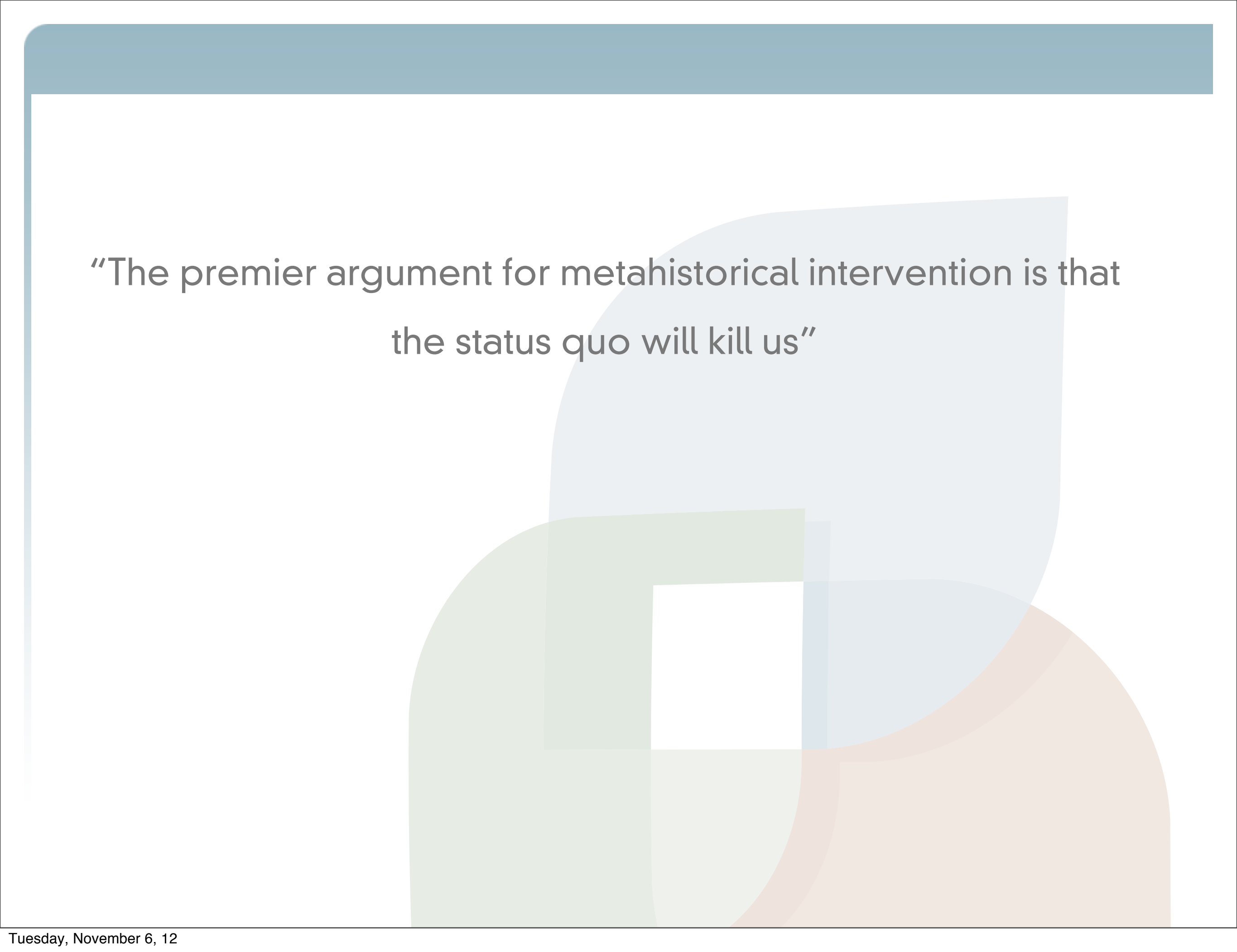
art, science, design, engineering
pure/applied
speculative/creative empirical



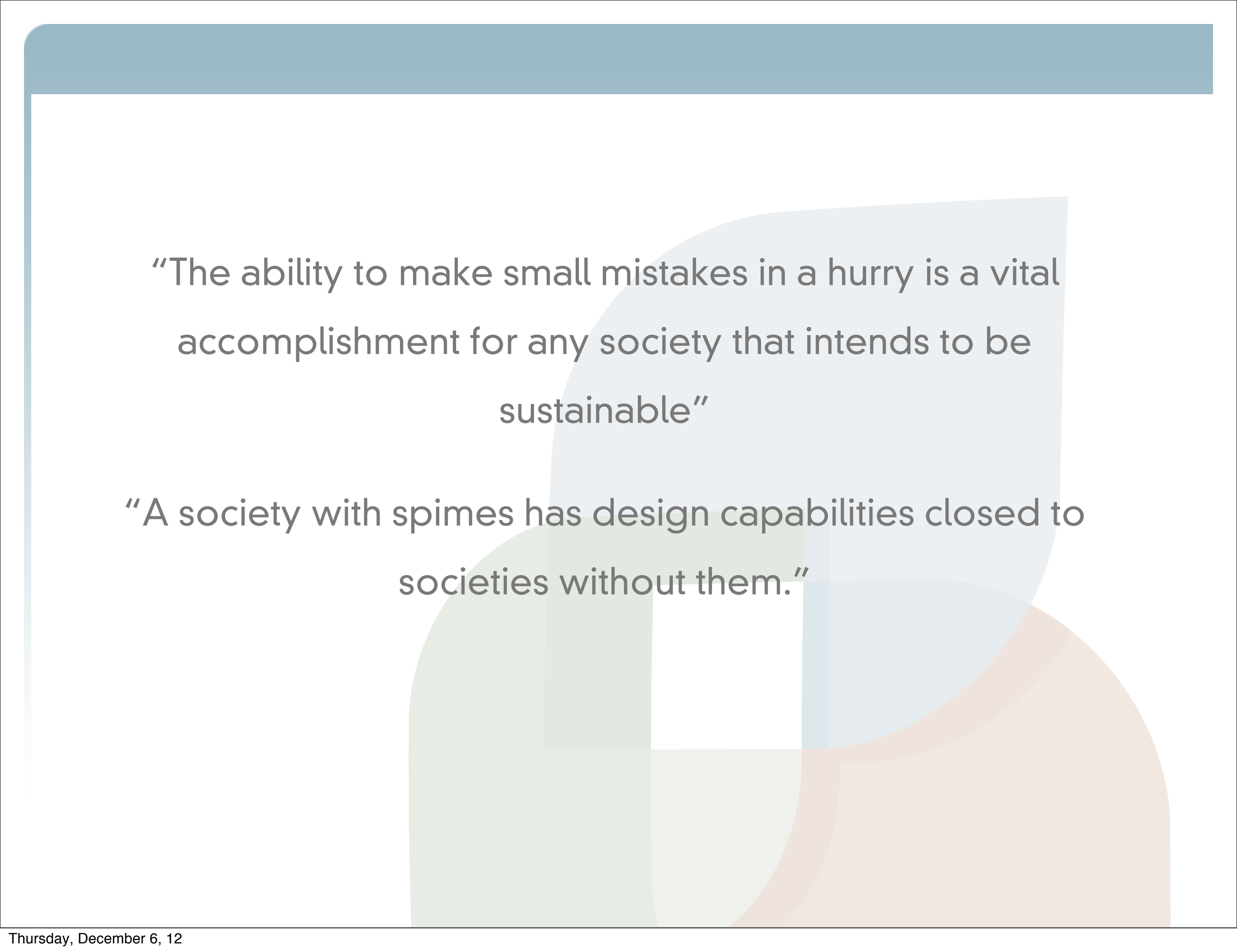
“How do people know what to expect from their things?”



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



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



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

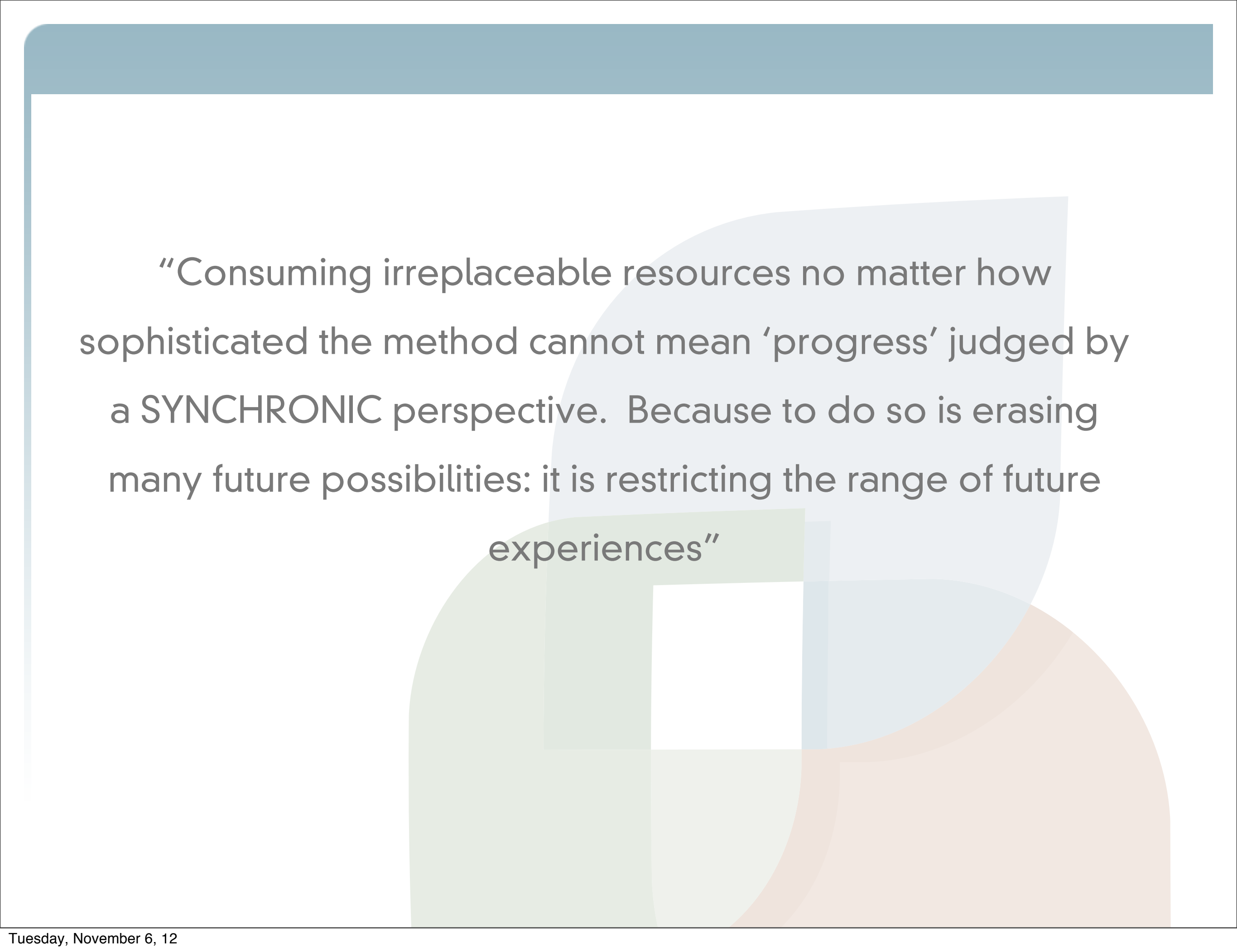
Every SPIME is a metahistory generator



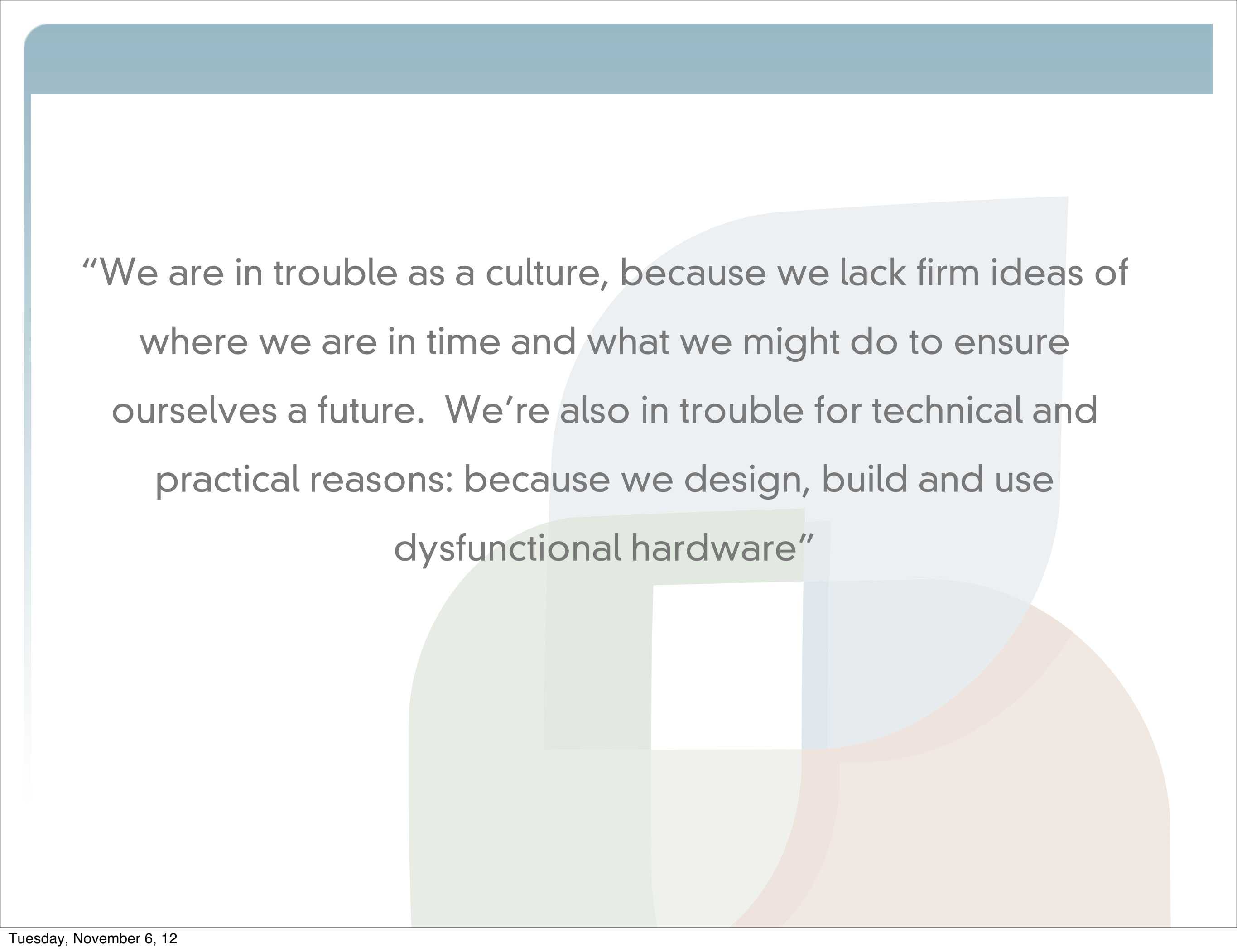
“The values of a synchronic society are temporalistic:
Do we gain more time by doing this or less time?”



“Temporalistic thinking is a moral worldview”



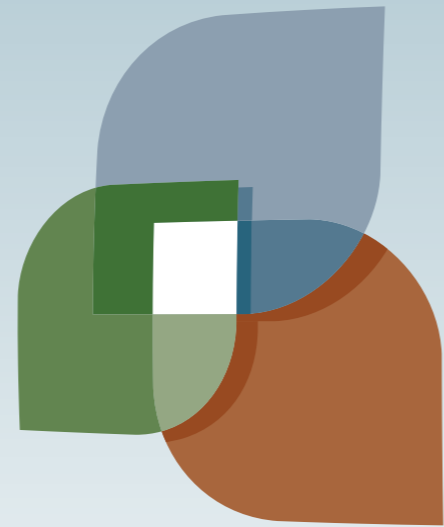
“Consuming irreplaceable resources no matter how sophisticated the method cannot mean ‘progress’ judged by a SYNCHRONIC perspective. Because to do so is erasing many future possibilities: it is restricting the range of future experiences”



“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”



“We are not nouns, but verbs”



L U C I

