

# Sense-making in our post AlphGo world



new mindsets & lenses may be required.

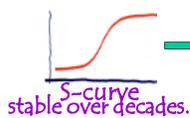
# Our Past context

## Push Economy of the 20<sup>th</sup> Century



20<sup>th</sup> century infrastructure drove organization architectures where

Scalable Efficiency was the holy grail.

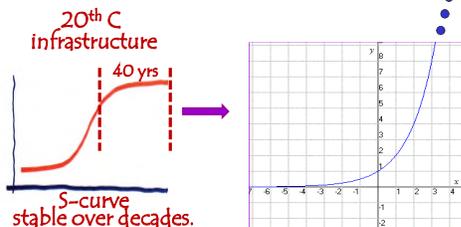


- predictable
- hierarchy
- control
- organizational routines
- minimize variance

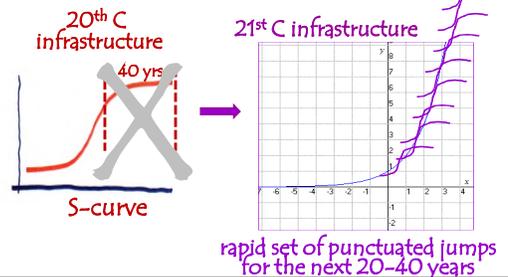
# then

## The Big Shift Happened

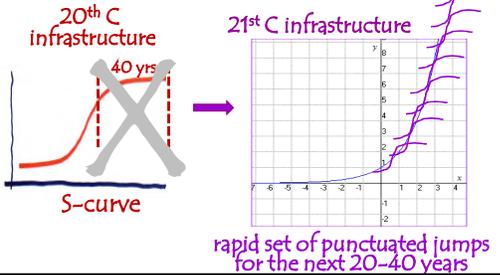
21<sup>st</sup> C infrastructure: no stability in sight driven by continual exponential advances in computation...



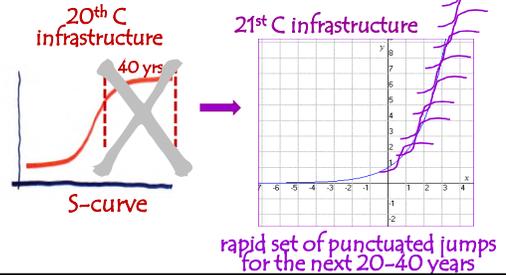
More realistically



yesterday's best practices  
are rapidly becoming outmoded



And our institutional architectures  
and even our ways of knowing.



## The Inevitable by Kevin Kelly

"The cycle of obsolescence is accelerating (the average lifespan of a phone app is a mere 30 days!), you won't have time to master anything before it is displaced."



And you call that progress???

Zooming out for a moment -

Let's explore this thru three different lenses.

Operational lens  
Epistemological lens  
Ontological lens

First, through an operational lens

Three quite different era required quite different learning strategies & ways of being

Industrial Age



Early Digital Age



Digitally Networked Age



a new world – white water



= increasingly fast, radically contingent & hyper connected

This era is no longer just about deepening individual expertise within a silo.

Instead, it is also about participating in & shaping knowledge flows



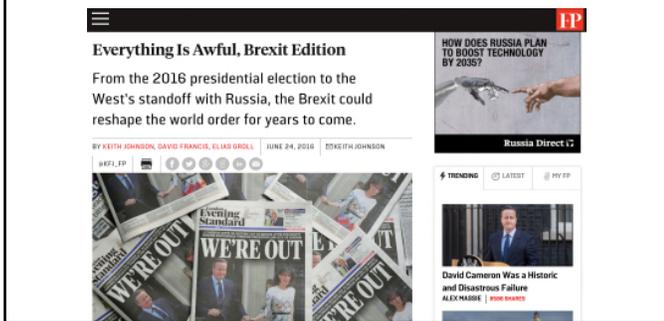
balanced & embedded when all is in flux

critical skills  
for a white water world

- skillfully reading the currents and disturbances of the context,
- interpreting the flows for what they reveal of what lies beneath the surface,
- leveraging the currents, disturbances and flows for amplified action.

But reading context  
isn't always simple:

As we've recently experienced in Europe & USA

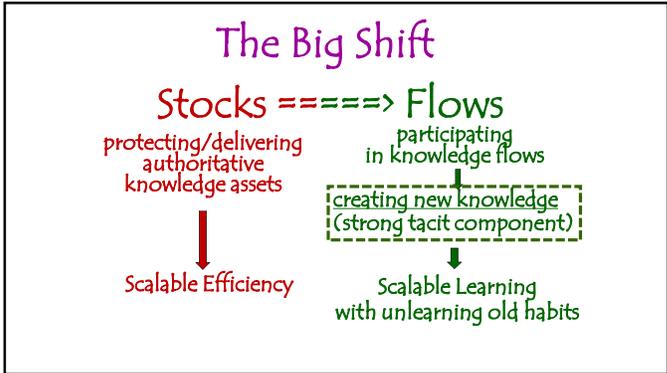


Data analytics can't do everything.  
Knowing what questions to ask is key.  
(data ≠ information ≠ beliefs ≠ values)

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Knowing what questions to ask is key.  
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And for that imagination is crucial especially if we are to escape the tyranny of the present

But also

Given the relentless pace of change & disruptions.  
Incremental learning will no longer suffice!!





And how do you do that, jsb?

## A Simple Start:

"How often do you get out of your comfort zone?"



Increasingly important in a global world of constant change!

## A Simple Start:

"How often do you get out of your comfort zone?"



And more generically – honor & amplify serendipity

## Orchestrating Serendipity Can be more than just luck!!!

Choose Serendipity Environments	Develop Serendipity Practices	Enhance Serendipity Preparedness
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All encounters: deep listening with reciprocity

## Also consider: Reverse Mentorship



And be an amazing source of insight but can also be humbling.

Reverse Mentorship – JC Hertz agrees to mentor jsb in game design in 2002



game critic –  
New York Times



A guild staff meeting WoW

## The Inevitable by Kevin Kelly

"The cycle of obsolescence is accelerating (the average lifespan of a phone app is a mere 30 days!), you won't have time to master anything before it is displaced, so you will remain in the newbie mode forever.

**Endless Newbie** is the new default for everyone, no matter your age or experience. That should keep us humble."

## The Big Shift

Moving from looking at it operationally to looking at it epistemologically.

Knowing (the what) and understanding (the how and the why)

### The Big Shift



### Said some what differently

How do we come to understand given the pace of change & dense interconnectivity?

Incremental learning no matter, how fast we do it, will no longer suffice.

We must be willing to regrind our conceptual lenses, often!

Assimilation ----> Accommodation

Living in exponential times in the global networked age that is densely interconnected many of our problems are wicked problems.

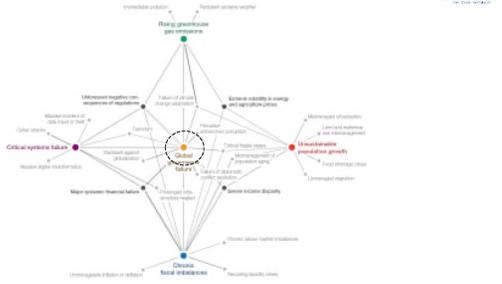
**They are not just complicated; they are complex**

"When we try to pick out anything by itself, we find it hitched to everything else in the universe.

There is no special sphere of the environment, no distinct lands of oil, no detached global economy, and no separate issue of public health."

Parag Khanna, *The Second World*

How the WEF maps these kinds of linkages



Risk Landscape Report

**Wicked Problems:**  
As soon as you start to solve them they morph.

The "Catch 22" of wicked problems is that you cannot learn about the problem without trying solutions, but every solution you try has lasting unintended consequences that are likely to spawn new wicked problems.

Examples of wicked problems include: global warming, the financial crisis, terrorism, environmental design, homeless.

Rittel & Webber

We need new ways to move from mechanistic thinking to understanding contexts/problems that evolve-sets of exchanges with complex feedback loops. Think dynamic attractors, network affordances and contextual propensities.

**Think Clouds, not Clocks**

*Karl Popper, the great philosopher, said all problems are either clouds or clocks..*

One of the problems we have as a culture is we take clouds and pretend they are clocks.

THROUGH THE LENS OF COMPLEXITY

**Think Clouds, not Clocks**

"...To understand a clock you can take it apart, its individual pieces and you study the pieces and then you can understand how a clock works. A cloud – you can't take apart a cloud. A cloud is a dynamic system. A cloud you can only study as a whole."

Perhaps this white water world may require

*"a new sense – a seventh sense"*

Joshu Cooper Ramo

"The seventh sense is the ability to look at any object and see (or imagine) the way in which it is changed by connection. Whether you are commanding an army, running a Fortune 500 company, planning a great work of art, or thinking about your child's education."

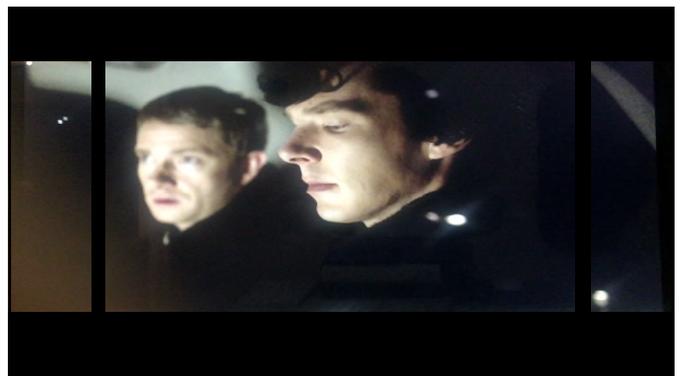
Joshu Cooper Ramo

## Crisis of Imagination

We need to "see" the ways that something/everything is changed by hyper-connectivity.

Or even  
just plain normal connectivity  
where connections are not obvious  
and making sense is elusive

Let's look at a master using  
his imagination  
to make sense



## Abductive reasoning

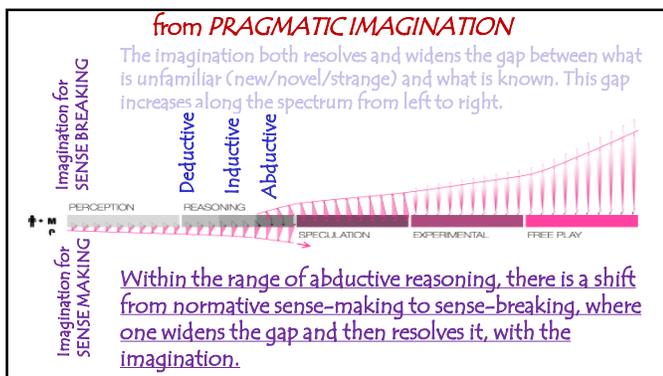
- imagining possible stories that suggest how something could have come about and then testing them..

A form of sense making when the facts don't add up or contradict each other.

As the power or capacity of humans to form internal images of objects and situations (visual, auditory or motor images), **THE IMAGINATION:**

- closes the gap between what is novel and what is known.
- finds connections between things that are not obvious.
- plays with boundaries. It lets partial thoughts jump fences.
- engages in sense-breaking in order to make sense in a new way – to see new possibilities.
- and in seeing new possibilities, it helps us escape the tyranny of the present.

*Pragmatic Imagination, apj + isb*



## reframing ain't easy

One approach is to use imagination to break the normal frame by expanding the gap... and then use imagination as in abduction to close the gap. ie. breaking frame & then reframing

Coming from Xerox I can tell you that getting the C-suite to do this is nearly impossible but is now more needed than ever in most C-suites I know.

## Increasingly Important

Imagination cannot just be an add on. It is not just relevant within the domains of the 'arts.'

It is crucial in sense-making & and even more so in sense-breaking/sense-making

## The Big Shift

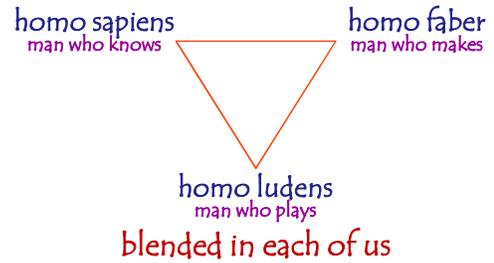
Moving from looking at it epistemologically to looking at it ontologically.

To construct these deeper understandings, today, we need to develop a new way of being – a new ontology.

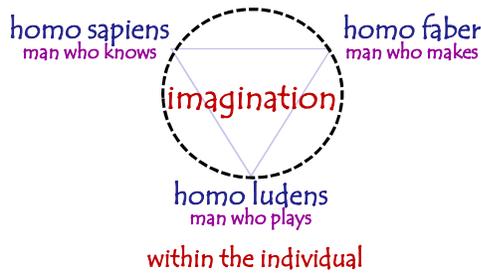


The unique power of the human imagination comes in part from its ability to integrate opposing qualities, like emotion and reason, curiosity and certainty.

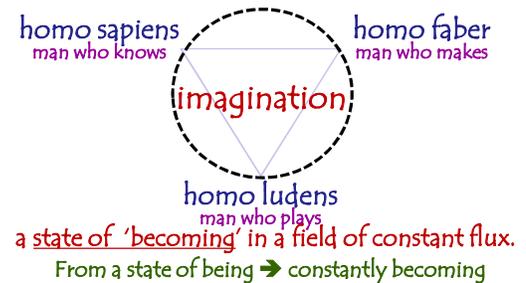
## We need to cultivate a blended ontology



## With the imagination as the binding agent



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Can we include AI/IA  
In this new blended ontology?

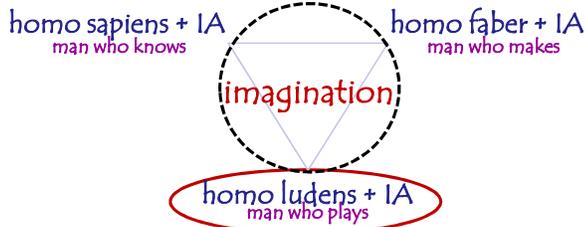
## Freestyle Chess tournament

The winners racing with the machine  
as a generative dance between us and machine.



Zack Stephen and Steven Cramton

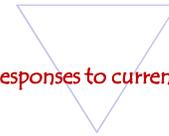
Cultivating a blended ontology with human/machine



With IA, the imagination (as the binding agent) has new properties

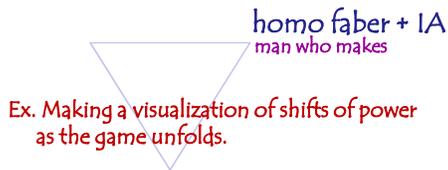
Cultivating a blended ontology with human/machine

homo sapiens + IA  
man who knows

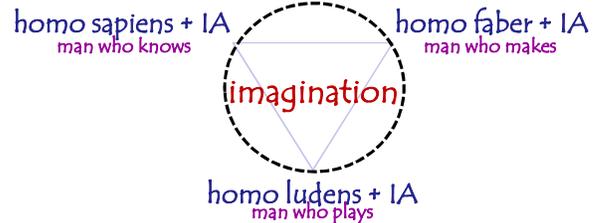


Ex. Collecting past responses to current board position in chess

Cultivating a blended ontology with human/machine

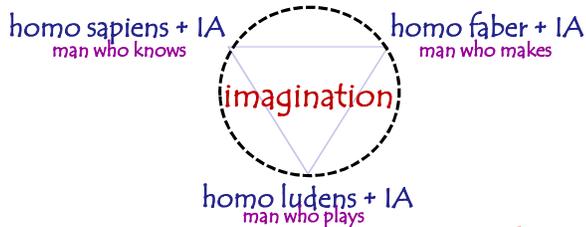


Cultivating a blended ontology with human/machine



Focusing on the individual *qua* individual

Cultivating a blended ontology with human/machine



Indwelling across a distributed community of practice – creating a networked imagination



But let us not be naïve because data and algorithms operate as black boxes especially in deep learning systems.



There is a blind spot in AI research

"A social-systems analysis is needed that draws on philosophy, law, sociology, anthropology and science-and-technology studies" – especially wrt the curation of the data used to train these deep learning systems.

"Only by asking broader questions about the impacts of AI can we generate a more holistic and integrated understanding..."

Kate Crawford & Ryan Calo

Our challenge today is one of sense making in a world that won't stay stable for our standard sense-making strategies to be effective.

Most of our pressing problems are wicked, our tools are increasingly opaque, our models and frames are outdated

We need to escape the tyranny of the present and meet head on the crisis of imagination.

