

Future of Work & a New Culture of Learning



Creating the resilient, resourceful, inspired learner.

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The past

18th, 19th, 20th C infrastructure



The era(s) of relative stability
→ Skills lasted a lifetime.
Career paths were clear

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We had a 20th Century Push-based model of education



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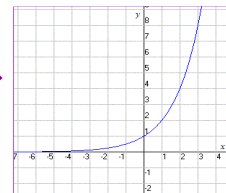
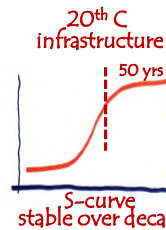
where efficiency was the holy grail often over effectiveness

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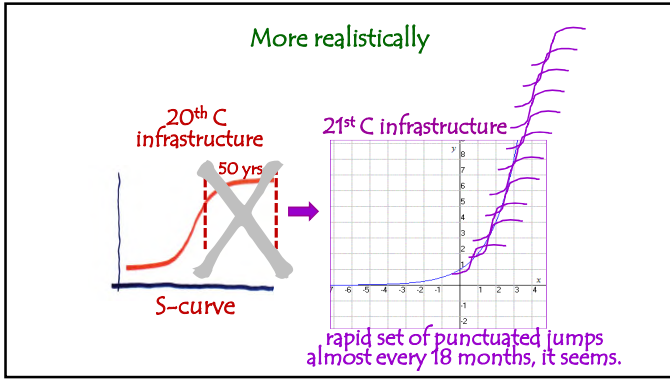
then
The Big Shift Happened

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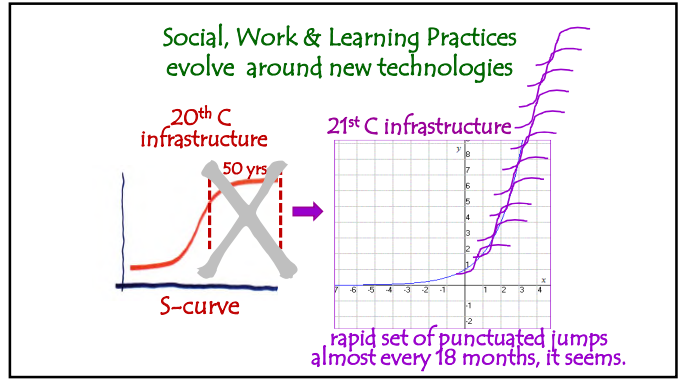
21st C infrastructure: no stability in sight driven by continual exponential advances in computation...



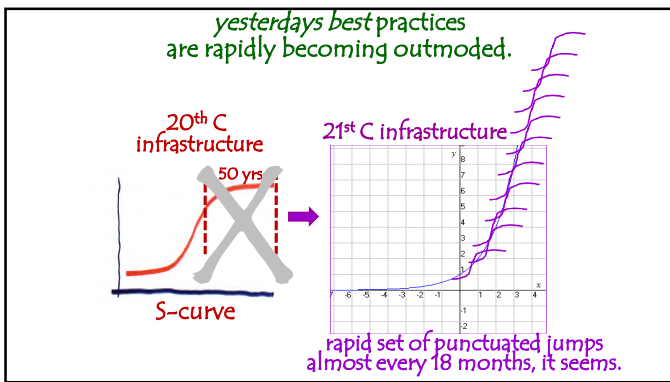
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In a world of increasingly rapid change, the half life of many stocks/skills is constantly shrinking. (perhaps as low as 5 years)

Stocks =====> **Flows**

protecting/delivering authoritative knowledge

participating in knowledge flows

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Too Big to Know:
By David Weinberger

"We used to know how to know. We got our answers from books or experts. We'd nail down the facts and move on. We even had canons."

"But in the Internet age, knowledge has moved onto networks. There's more knowledge than ever, but it's different. Topics have no boundaries, and nobody agrees on anything."

We need new strategies and tools for learning/working/sensemaking & creating meaning.

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

Industrial Age	Digital Age	White Water World; Emerging Networked Age

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Welcome to the new white water world.



= increasingly fast, radically contingent & hyper connected

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What kind of learners do we need for this white water world??

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Participation & the embodied mind



Knowledge experts, who are experienced in picking information should be treated like an action sport, a white-water rafting trip navigating through the waters of knowledge and interaction.
Ben Goff/The Gaston Gazette/AP

Reading context really matters!! (and that is a skill)

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Participation & the embodied mind



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Ben Goff/The Gaston Gazette/AP

Hand & Head the lived experience

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But most important!



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Ben Goff/The Gaston Gazette/AP

Knowing your own center – authenticity re-conceived

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We also need Entrepreneurial Learners



Which is NOT the same
as being an entrepreneur!

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Dispositions of an entrepreneurial learner.

- > Always questing, connecting, probing.
- > Deeply curious and listening to others.
- > Always learning with and from others.
- > Reads contexts as much as content.
- > Thrives outside of the formal curriculum
- > Reflects on performance with the help of cohorts – reflective practitioner.

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YES, we need:
New approaches to learning,



Ah, perhaps a blended epistemology
(i.e., ways of knowing)
for a white water world.

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A Blended Epistemology

Homo Sapiens  *Homo Faber*
man as knower man as maker
↓
content/things

Thank you, John Dewey!

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A Blended Epistemology

but the tools of *homo faber*
are also changing!!!

Homo Sapiens  *Homo Faber*
man as knower man as maker
↓
content/things
&
context

Shift: content -----> content + context

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Given that meaning emerges
as much from
context as content
new dimensions
to the creation of meaning are opened.



Ah, the essence of remix..

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Ah, let me change the music
of a film and I can alter
not only its meaning but also
what you actually "see"!!!

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In a fluid world
judgment and critical thinking
is more important than ever...



reading/interrogating context is king
especially given that many of
the millennials (or post) believe there are no authoritative sources!

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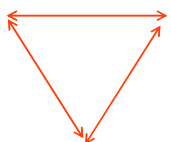
Then, let's go a step further..

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Adding *homo ludens* man who plays

homo sapiens
man who knows

homo faber
man who makes



homo ludens
man who plays

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Homo Ludens a highly nuanced concept of play

- as in permission to fail, fail and fail again and then get it right;
- as play of imagination – poetry
- as in an epiphany – suddenly falling in place as in solving a riddle.



Learning as riddles,
leading to a reframing of "the world".

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A Simple Reframing

A black dog is sleeping in the middle of a black road that has no streetlights and there is no moon.
A car coming down the road with its lights off steers around the dog.
How did the driver know the dog was there?

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A less simple riddle - reframing

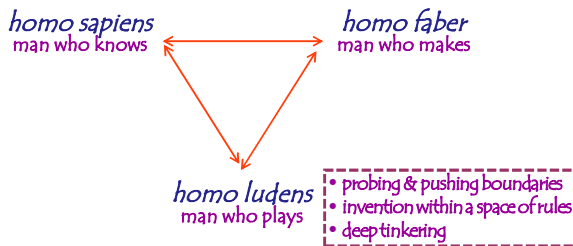
What has no beginning
And has no end.
Goes on forever.
No one can travel its whole length
And here's one hint more:
It takes refuge in a figure eight.



Can you feel the play of imagination, here?

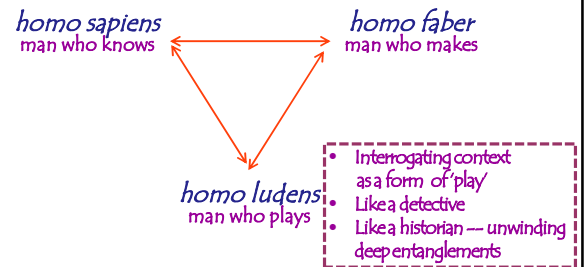
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Extending the Blend even further

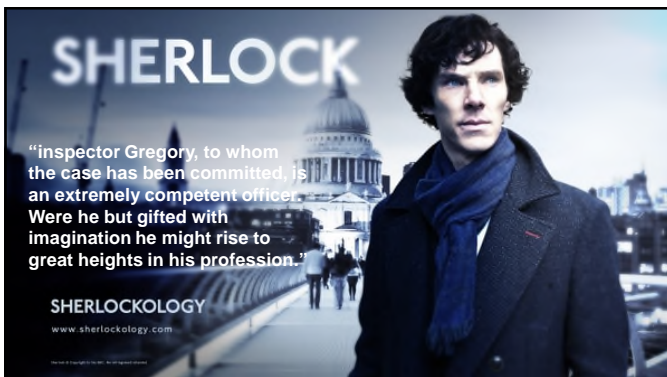


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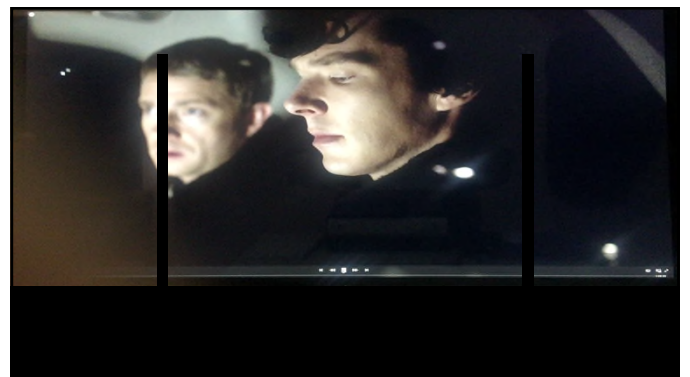
Extending the Blend even further



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But how might we teach differently?

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we start each class having students describe what they did the past week to make someone else in the cohort better (small things count) which helps build a culture of support and value collaboration.

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Let's look at another example.
Cogswell Polytechnical



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The Gogswell Mantra
Turning Passion Into Practice

A model for college in which each student discovers and develops their own unique balance between art, engineering and play

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Three core courses that surprised me:

- i) life drawing (2 semesters)
- ii) clay sculpture (1 semester)
- iii) sound sculpture ...

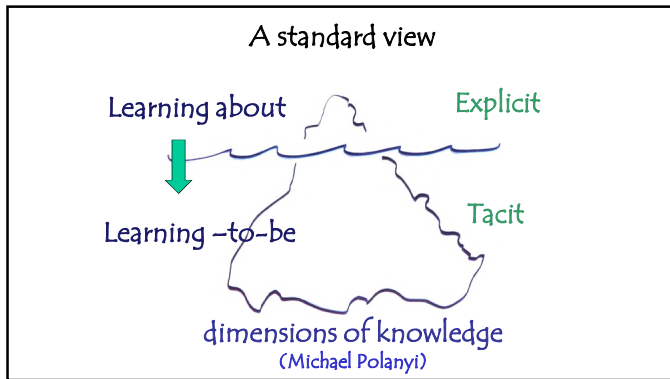


Remember – this is NOT an art school but a polytech – computer sci/engineering/ game design – for silicon valley companies.

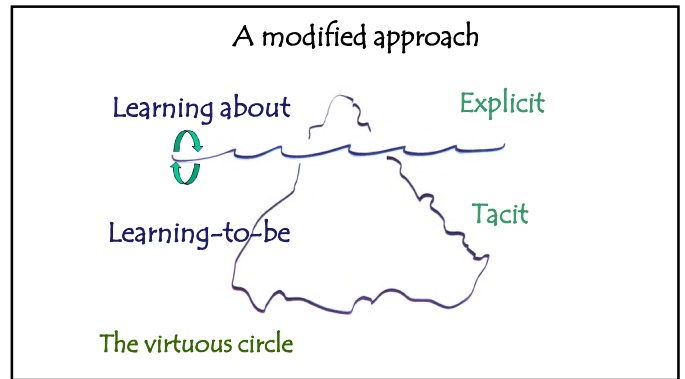
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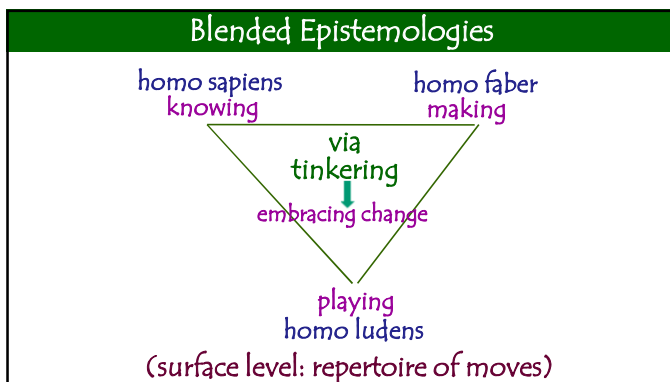
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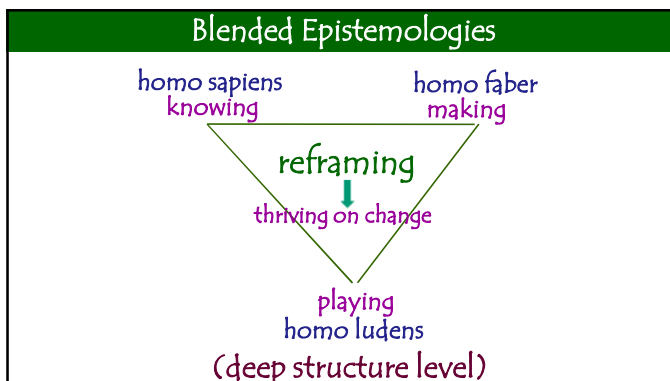
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But Tinkering can be more.

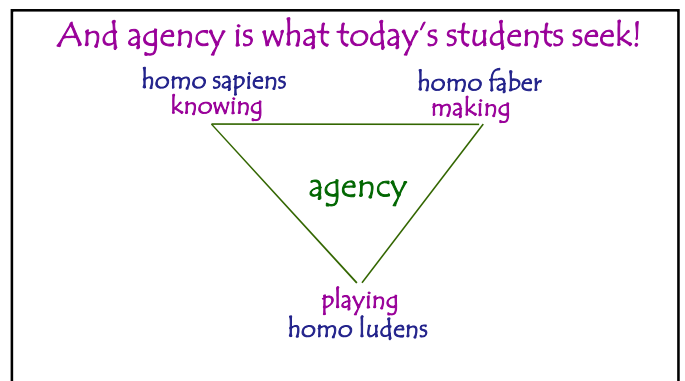
- developing a gut 'feeling' for systems
- know how/what can be pushed around,
- rearranged, repurposed, modified
- developing an intimate familiarity with
- material at hand
- embodied immersion
- developing an instinct
- deeply situated

And can lead to:

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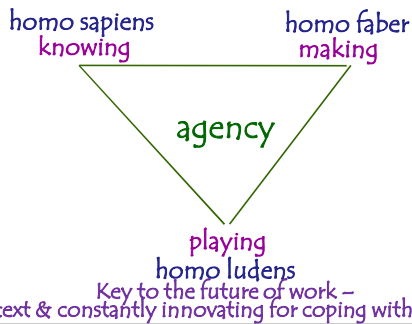


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And agency is what today's students seek!



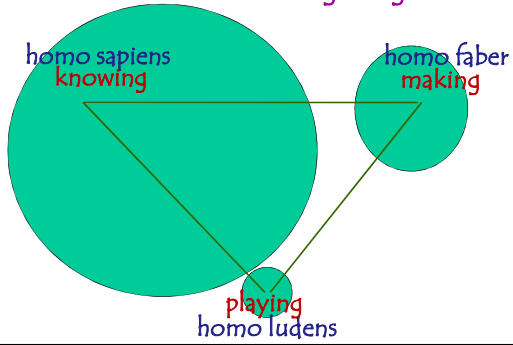
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The Big Picture



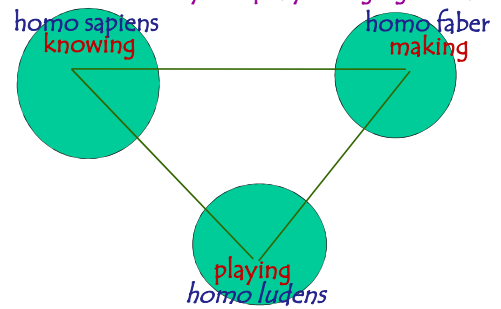
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Our current weighting:



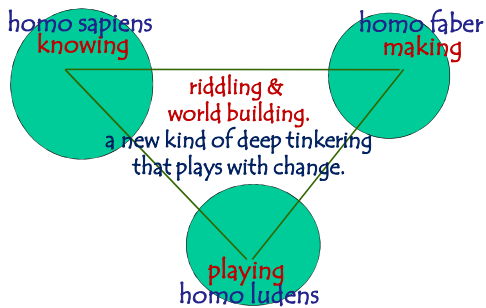
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Suggested weighting:
for a constantly & rapidly changing world



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Cultivating the Imagination



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The Bigger Picture



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Garry Kasparov
Grand Master



VS

Deep Blue



1996 vs 1997

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Freestyle Chess tournament

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



Zack Stephen and Steven Cramton

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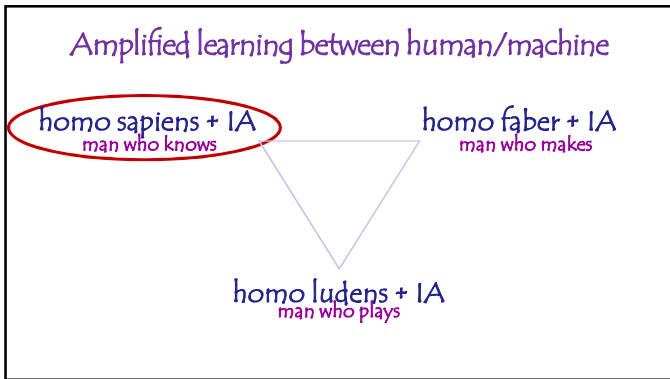
Can we include a new kind of
generative dance
between us and AI/IA
in this new blended epistemology?

'Us' being student or teacher or all of us in a 21st C workscape.

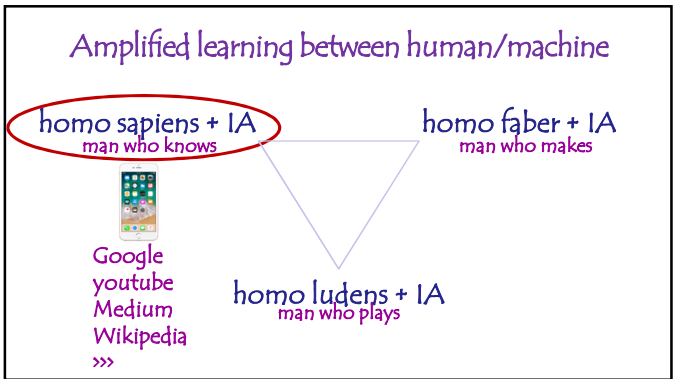
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Let's see.

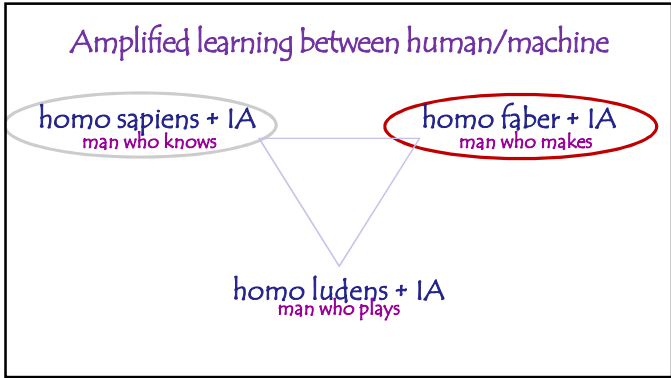
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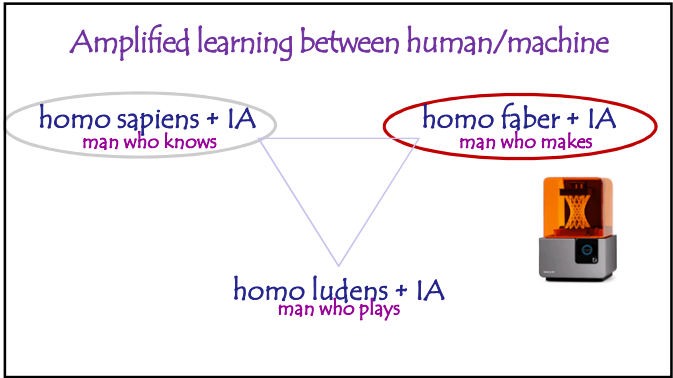
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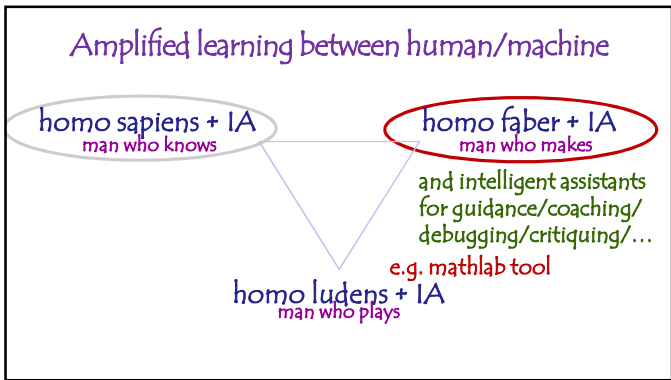
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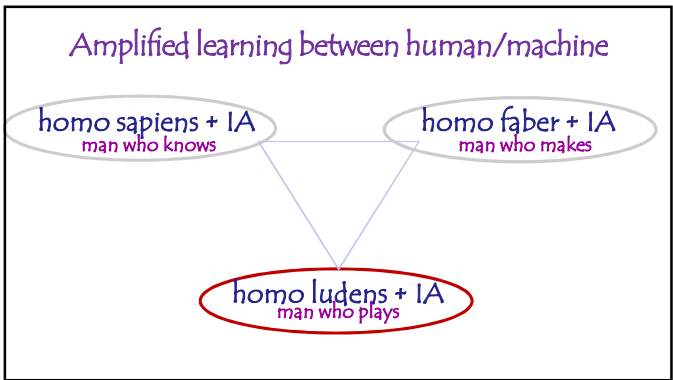
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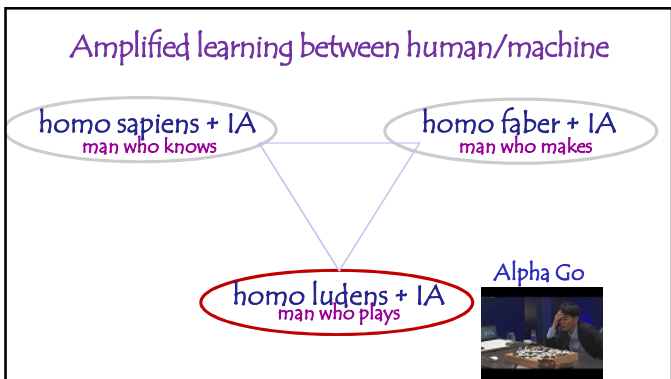
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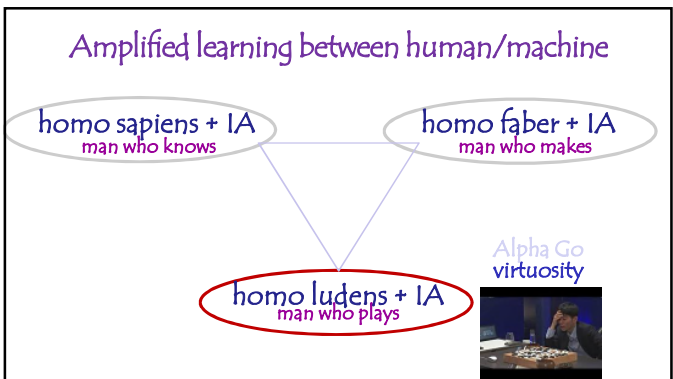
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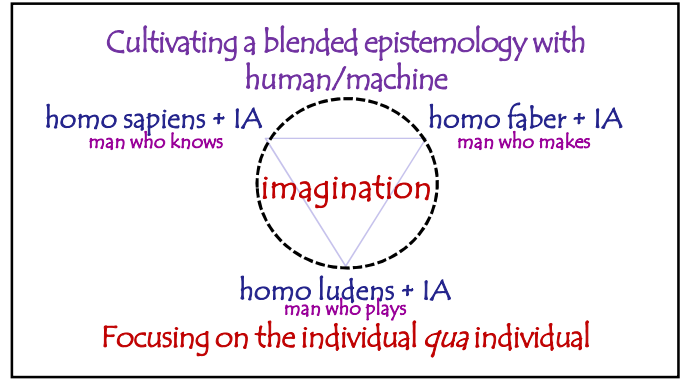
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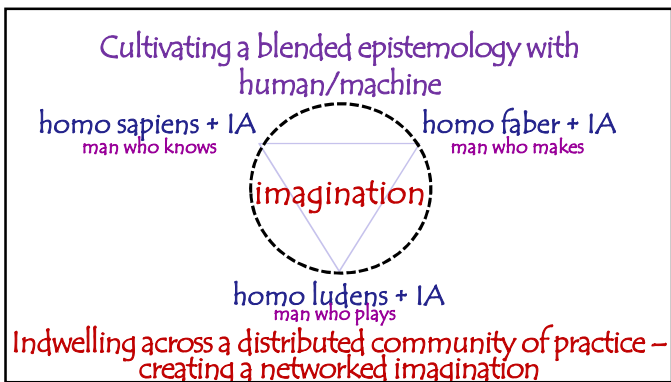
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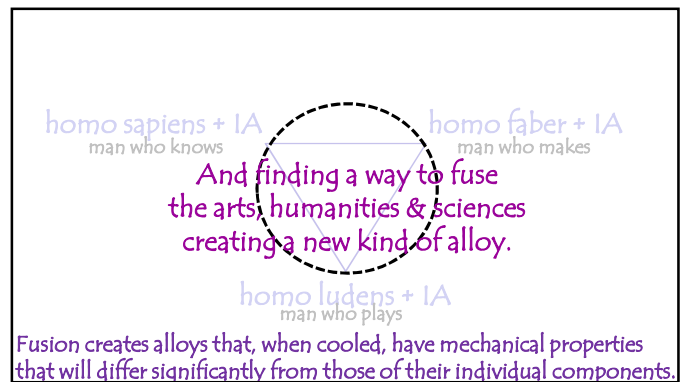
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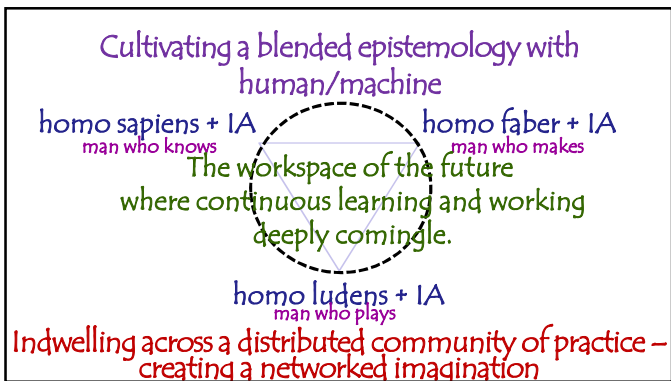
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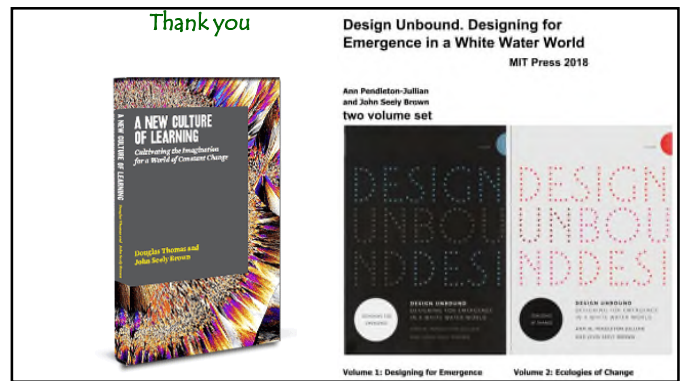
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