We should provide the environment for youth to continue their Human Habit of Doing Arts as the "Courage to Think Alone" so to maintain the Diversity of human culture in the Age of Culture as Algorithm.

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1. We're living in a digital civilization
   that's completely different from anything we've ever seen before.

Very Weird cultural phenomena in the Age of Digital Transformation

To sell national treasures as NFTs

To increase the price of art work by burning the original


Metaverses and the Virtual Human Boom

AI's surpassing humans in cultural production

Due to the social distancing situation, the introduction of new technologies proceeded so quickly. Otherwise it would have been confronted with significant institutional and psychological resistance. Such rapid development of algorithmic technology has created very weird cultural phenomena.

2. This is the era of "Culture as Algorithm"

Culture as Algorithm	Culture **on** the Algorithm
	Culture **by** the Algorithm
	Culture **for** the Algorithm
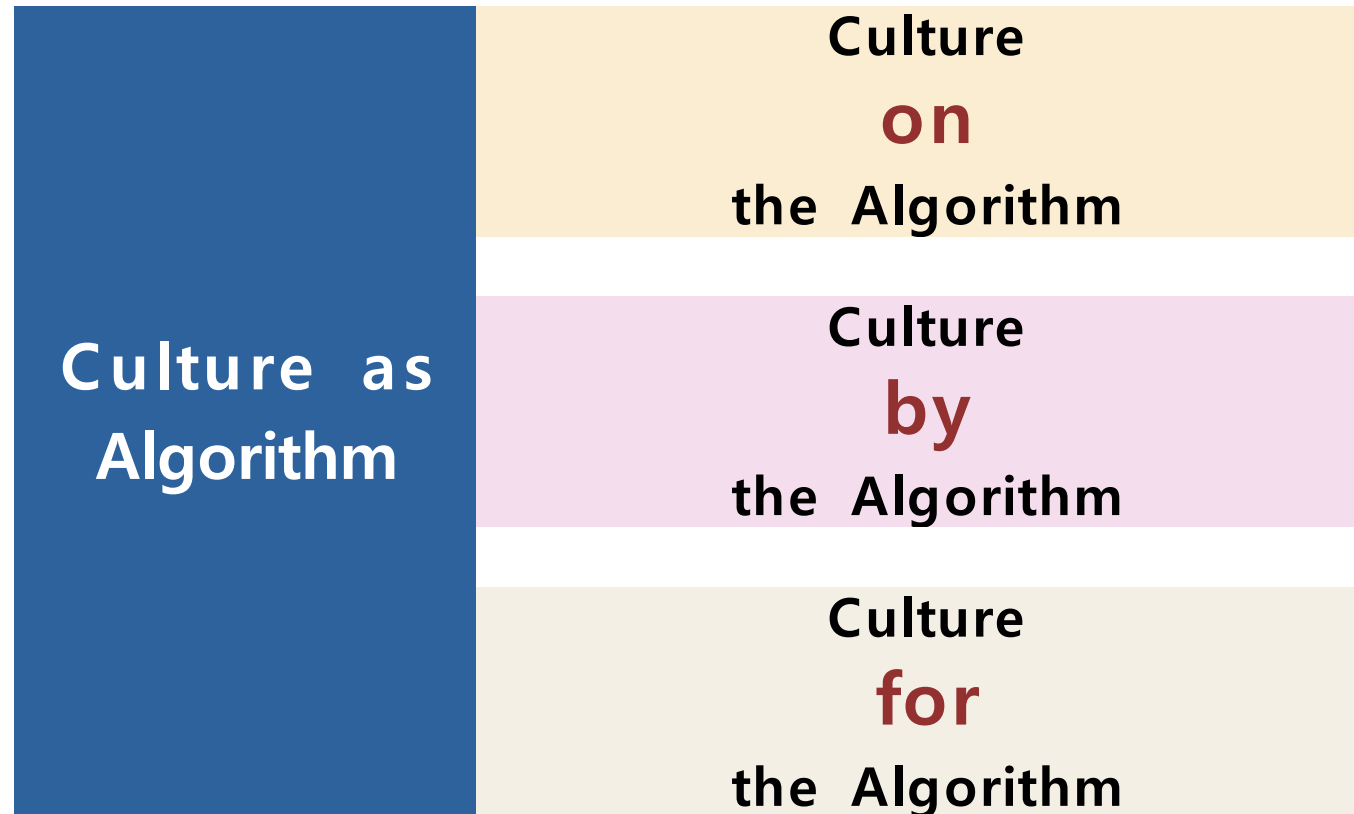
I have been observing it as the era of Culture as Algorithm; where Culture is on, by, for the Algorithm.

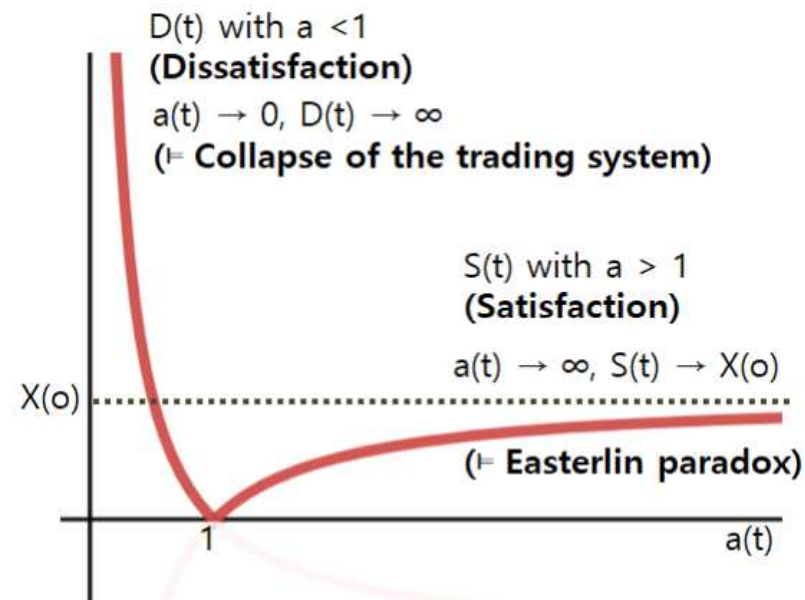# 3. The phrase "AI ethics" is better replaced with "Quality standards" of machine.

Indeed, the "Culture Machines" have evolved to generate something like culture and act as if they are cultural agents. But, AI is only a Tool like "mirror" that reflects the human world. We should not go to the way of tragedy by the Queen of Snow White. It's better to call it "appropriate quality standards of product" instead of "AI ethics". We should emphasize "the human ethics in developing and using AIs", instead.

4. We need to understand the "Emotional Economics" in the DMZ (De-Monetization Zone), where big tech companies accumulate De-monetized profits from cultural transactions, and create fair rules of the new game.

<Satisfaction-Dissatisfaction Curve of Emotional Economics>

D(t) with a <1
(Dissatisfaction)
$a(t) \to 0,\ D(t) \to \infty$
($\models$ Collapse of the trading system)

S(t) with a > 1
(Satisfaction)
$a(t) \to \infty,\ S(t) \to X(o)$

X(o)

($\models$ Easterlin paradox)

1

a(t)

We also need to set up a social system so that the Big-Tech companies fairly distribute the profits earned by utilizing <Culture for the Algorithm> as the data for AI training. This should include "the profit that isn't money," or De-Monetized profit, which is accumulated by leveraging data of human emotions. It is necessary to understand the "Emotional Economics" of the new cultural capitalism that follows the "satisfaction-dissatisfaction curve".

5. For the sake of human evolution, we need to reflect on the reasons for AIs' success.
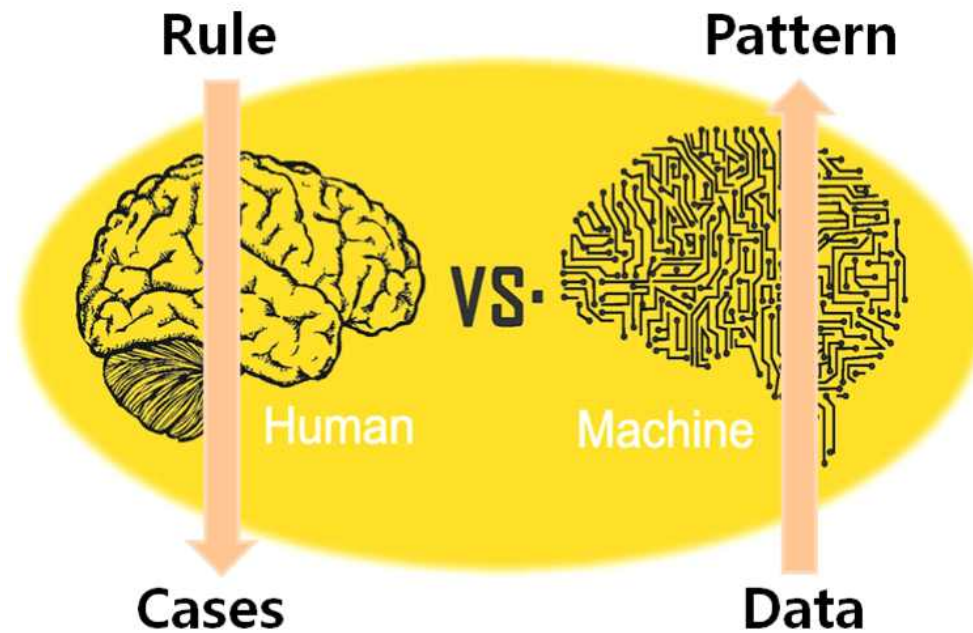
The recent success of AI is very similar to the process which humans gain a wisdom in life. But, unfortunately, as parents, we're not doing the same thing with our children: we're giving them rules, expecting them to memorize and follow them, before they've had a chance to formulate their own principles through experience.

6. AIs will evolve faster, more continuously,

   and even more "culturally" than humans.
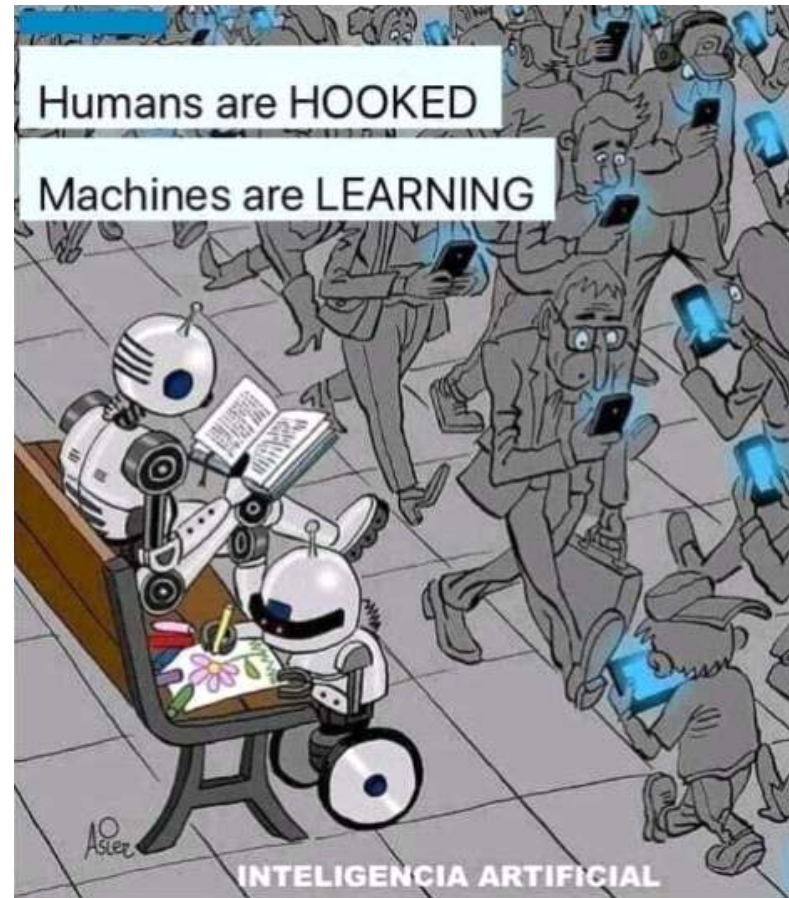
As this cartoon says, while humans get hooked on the new technology, AI never stops learning.

Cultural Algorithm
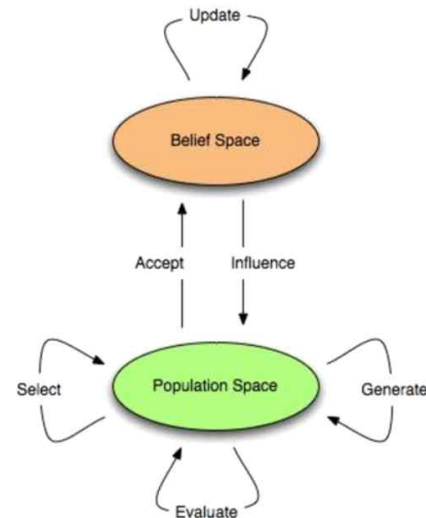## (Reynolds, 1978, 1994)

Begin
t = 0;
initialize Bt, Pt
repeat
    evaluate Pt {obj()}
    update(Bt, accept(Pt))
    generate(Pt, influence(Bt))
    t = t + 1
    select Pt from Pt – 1
until (termination condition achieved)
End

Update

Belief Space

Accept   Influence

Select   Population Space   Generate

Evaluate

The Emergence of Social Intelligence and Socially Motivated Problem Solving

- Traditionally Artificial Intelligence has focused on the nature of "individual intelligence". Goal was to create programs that compete with the best "individual". E.G. Deep Blue in chess.
- With the advent of high performance distributed networks of computers and grid computation there is much incentive to investigate socially motivated problem solving.
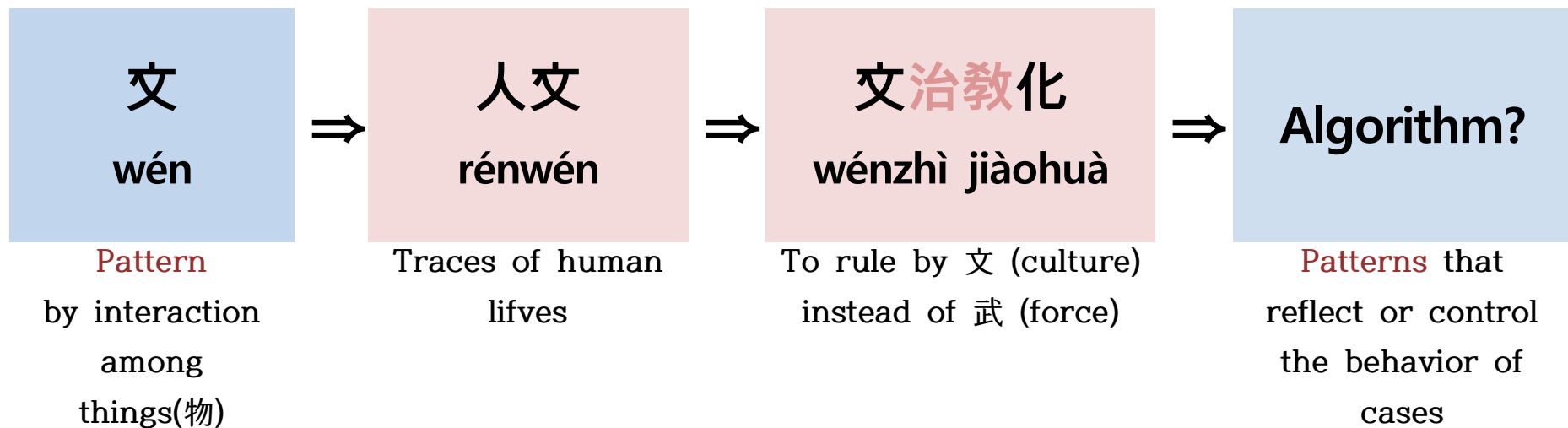- Example frameworks have come from naturally occurring systems.

2

(source : Robert Reynolds(2023))

In the future, it will evolve even into a "cultural algorithm" to function more appropriately in human society, maybe even beyond human language and perception to understand the principle of nature.

7. The ancient Eastern worldview, which is more associate with posthumanism of today, did not see culture as uniquely human.

<Changing Conceptions of Culture from Ancient to Modern Times in East Asia>

文 wén	⇒	人文 rénwén	⇒	文治教化 wénzhì jiàohuà	⇒	Algorithm?
Pattern by interaction among things(物)		Traces of human lifves		To rule by 文 (culture) instead of 武 (force)		Patterns that reflect or control the behavior of cases

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In the view of Tao(道=the order of nature) of the ancient East, human beings and non-human beings were inter connected objects. And the "patterns" they created by interacting with each other were called "文(wén)", which is culture today. As we see that AI finds proper rules through correlation in "patterns" of "mindless" data, there is a stronger connection between the ancient idea of culture and digital algorithms.

8. If the "cultural gene" is also selfish, it will choose the "culture machine" as its host rather than humans.


"The next phase of human evolution will be influenced more by cultural and technological evolution than biological evolution. The evolution of culture is millions of times faster than the evolution of genes, as evidenced by the development and changes in computers, fashion, automobiles, etc. There is no room for natural selection".

**(Richard Dawkins, in an interview in South Korea, 2017)**

"Culture Machines" like AI are more powerful than humans when it comes to replicating, creating, spreading, and trending culture. If "MEMEs"(=cultural genes) are selfish, like Richard Dawkins' said, they are likely to choose machine hosts. Machines are more favorable than human hosts for further reproduction of culture. Human culture can easily get alienated.

<Check & Balance among the Cultural Subjects hiding their desires>
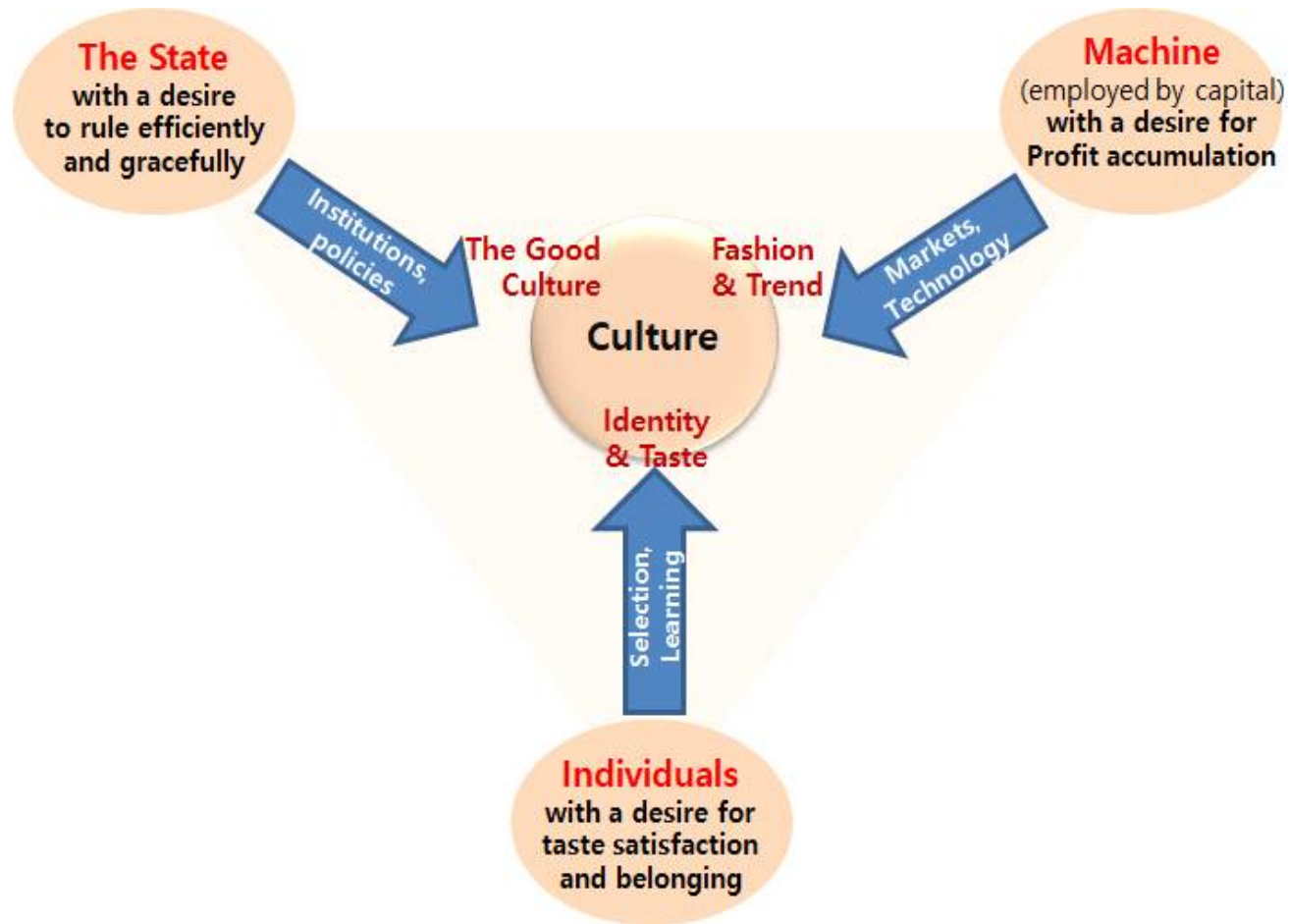
If humans do not keep a check and balance between the two other cultural agents, State and the Machine, we will not be able to escape the dictatorship under the name of "cultural state" or the capitalist exploitation under the promotion of "cultural life". When the machine(or capital) becomes so powerful, as it is now, the humans must borrow the power of the state to keep it in check.

9. Diversity is key to maintaining a human culture.
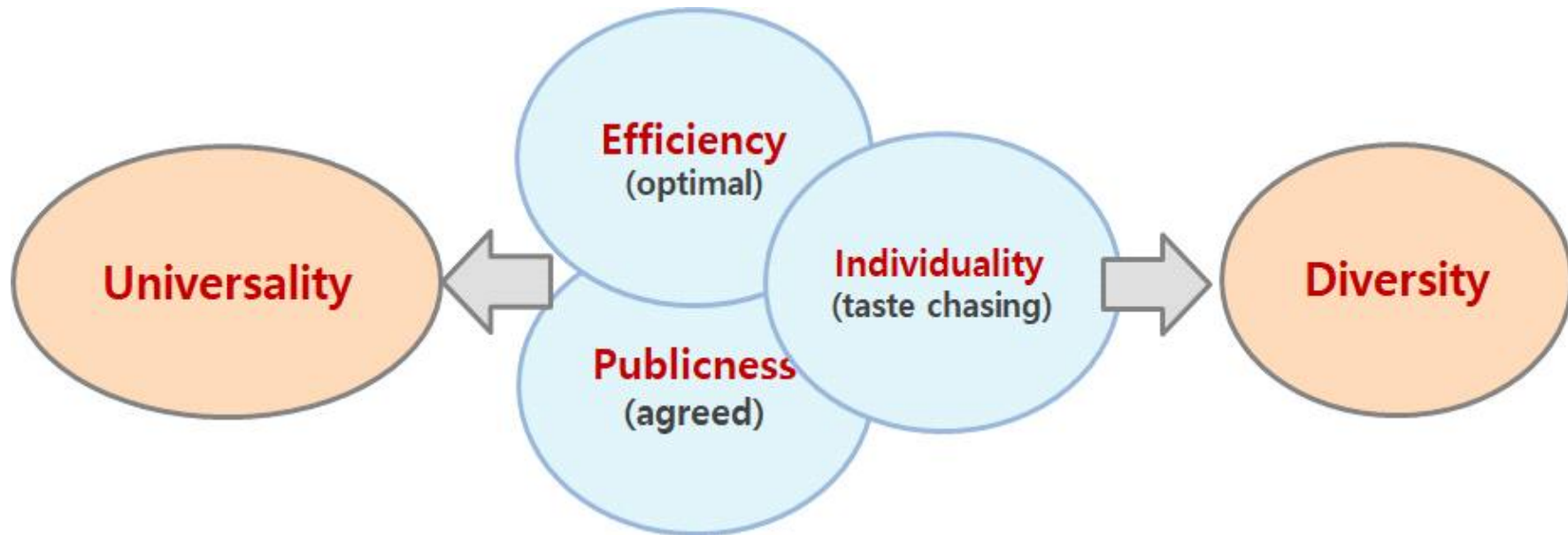
Diversity is key to the evolution of life and even to the performance of AI. But, the cultural policy of the state aims at "agreed" universality as a public good, while the cultural machine aims at "optimized" universality for profit maximization. Humans, with their individualized bodies and tastes, seek cultural diversity in an "ecological" way. It is key to maintain the health of society.

10. Cultural diversity is maintained when
   <Arts by Humans> that find and add Meaning of "the Real"
   can be added to the very authentic Reality imitated by <AI's Creation>.

<The difference between Human Art and Machine Creation>

Authentic		True
Reality	⇔	**Real**

|	
a Sensory services	**the meaning of life**
to be provided	**and the reasons for nature**
through the Imitation	to be Appreciated and Reproduced
by AI's Creation	**by Human's Art**

The reason why machine's creativity and its outputs are not art is that it's humans who give them a value as art. Humans call it art when they can find "meaning" in it, not just "utility". A machine can simulate even a very authentic sense of reality and provide it as a "cultural service" that stimulates the human senses. However, humans want to find, magnetize, and reconstruct the meaning of the real that exists beyond the realm of the senses. Humans have been given that task as a result of being in a "dying body", and it is a survival skill that we have developed to create a reason to live. So we human beings are all "artistic beings" who do arts. This human habit of doing arts is necessary to feed cultural diversity and keep societies healthy.

11. It's up to adults now

to provide the environment for youth to continue their human habit of doing arts as a "Courage to Think Alone."

<Etymology of the hieroglyph 文(=culture)>
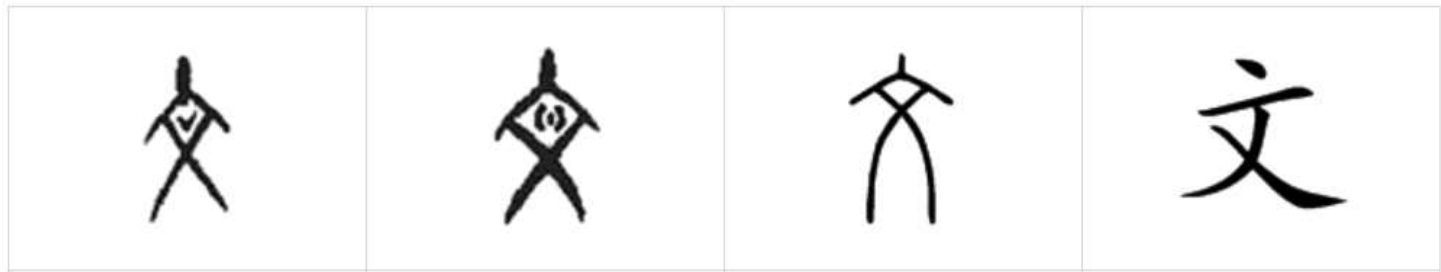
The book "The age of AI" by Eric Schmidt and Henry Kissinger says humans have lost both the time to quietly contemplate and the "Courage to Think Alone". The other perspective the etymology of 文(=culture) portrays the character itself as an illustration of a person marked with a tattoo representing the heart on the body. The heart symbolizes life and courage.

\<Focus of Arts & Education program by SFAC>

Before 2021	Since 2021	for the Future
AiE **(Art in/is Education)**	**AiC** **(Art in/is Communication /Community/Commons)**	**AiH** **(Art in/is Humanity)**

What we need to do now is to create fair rules of the new game so that young people should not lose their "Courage" to continue doing arts and science in front of an AI that spits out plausible answers and stunning images. The arts & education program implemented by the Seoul Foundation for Arts & Culture is an activity that fosters the "courage to do art." While before the pandemic, the program focused primarily on "Arts in Education," during the pandemic, on "Arts in Communication," and now, in the age of AI, it should focus on "Arts in Humanity."

2025 UNIMA General Assembly @ 춘천인형극제 PUPPET FESTIVAL CHUNCHEON
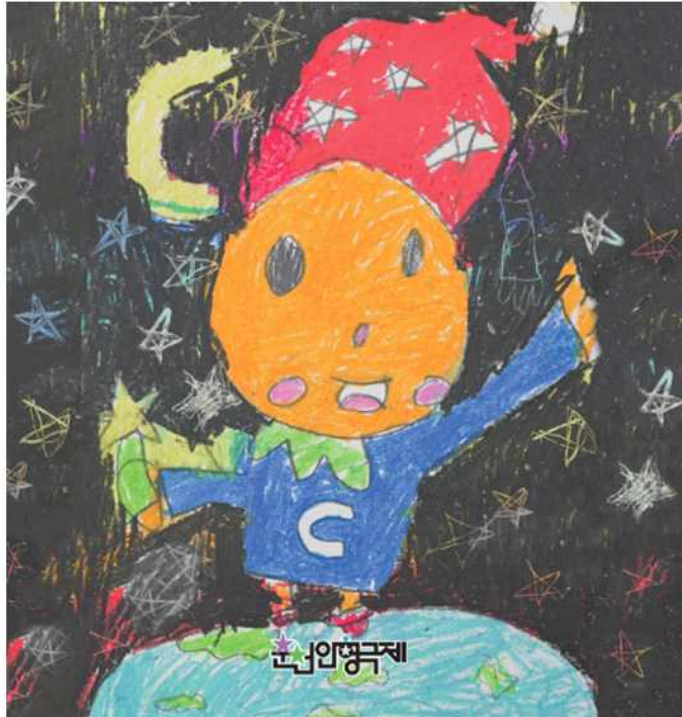
Let's continue the dialogue in Chuncheon, Korea!15)

Puppetry is the art of interaction between humans and non-humans. In 2025, puppeteers from around the world will gather in the beautiful lake city of Chuncheon, in South Korea, for the UNIMA General Assembly. I look forward to continuing the dialog about art, technology, and humanity by the lake. Thank you for your attention.
https://www.youtube.com/channel/UCchmV8Eh-X3vPHIhkmi-5w/videos