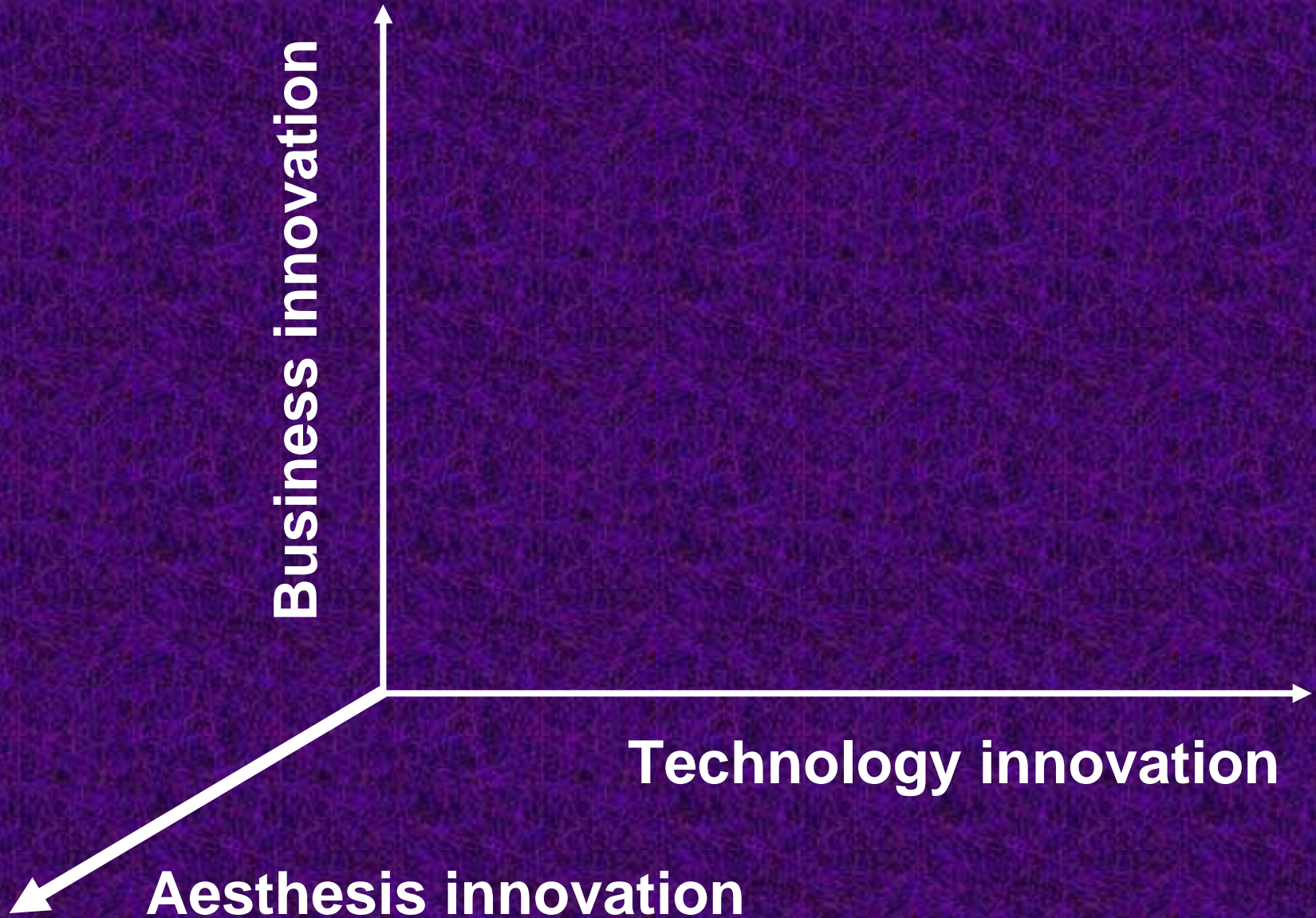# Innovation space
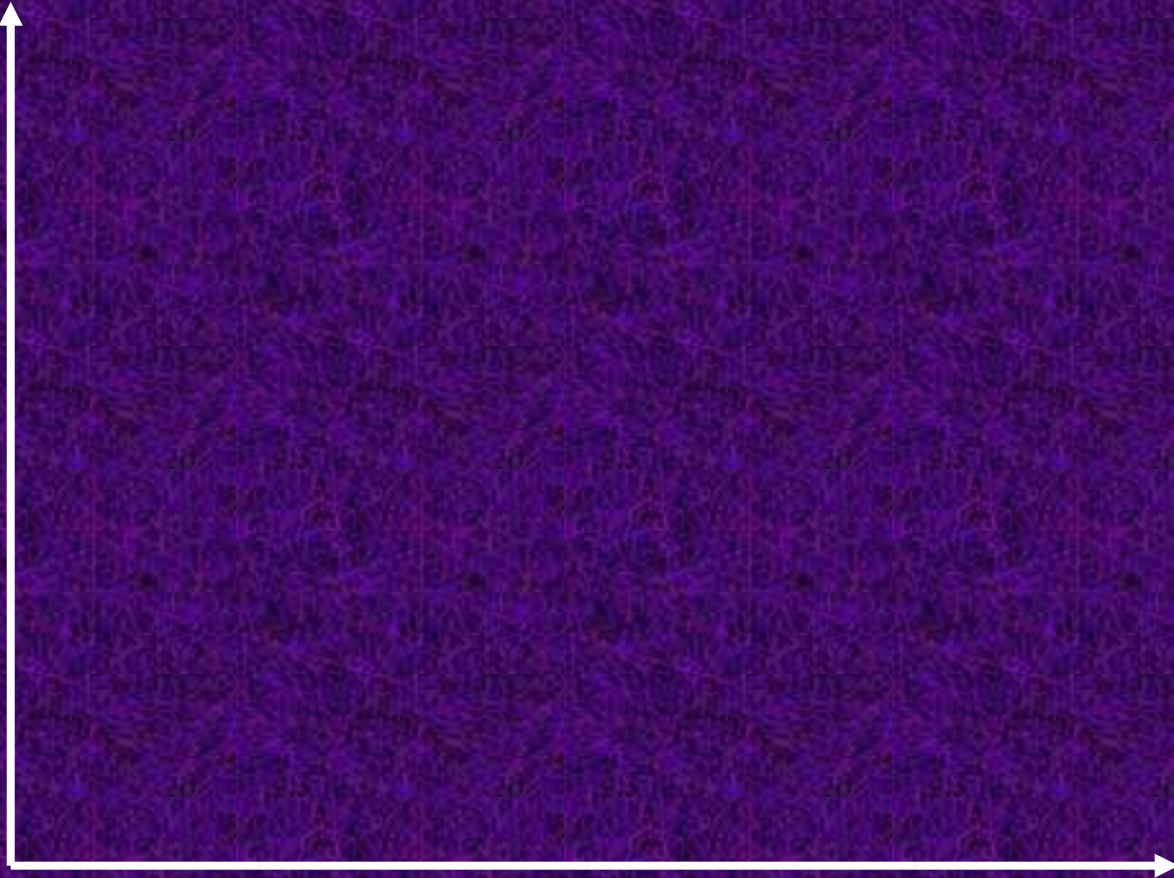
Business innovation

Technology innovation

Aesthesis innovation

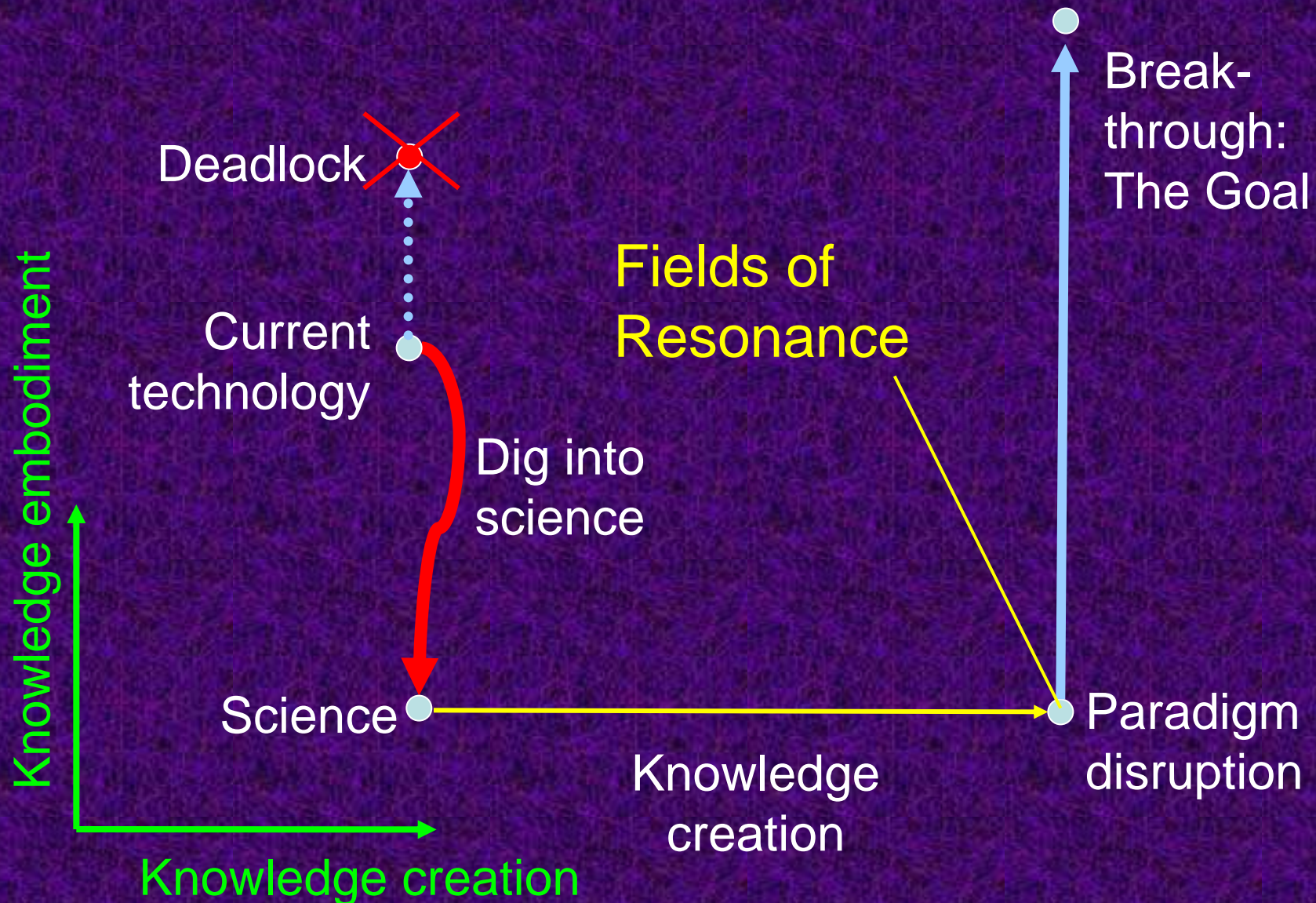# Innovation diagram !

Value createion / Knowledge embodiment (e.g. technology)

Knowledge Creation
e.g. Science

Innovation process

Structure of innovation

MOSFET
  Transistor
HEMT
  MOSFET
Blue LED / LD
  all other LED / LD

Paradigm-
disruptive

Christensen's
disruptive

Christensen's
sustaining

Thin film head / MR head
  (Ferrite head)

Smaller HD drive
Larger HD drive

Paradigm-
sustaining

Transistor
Vacuum tube
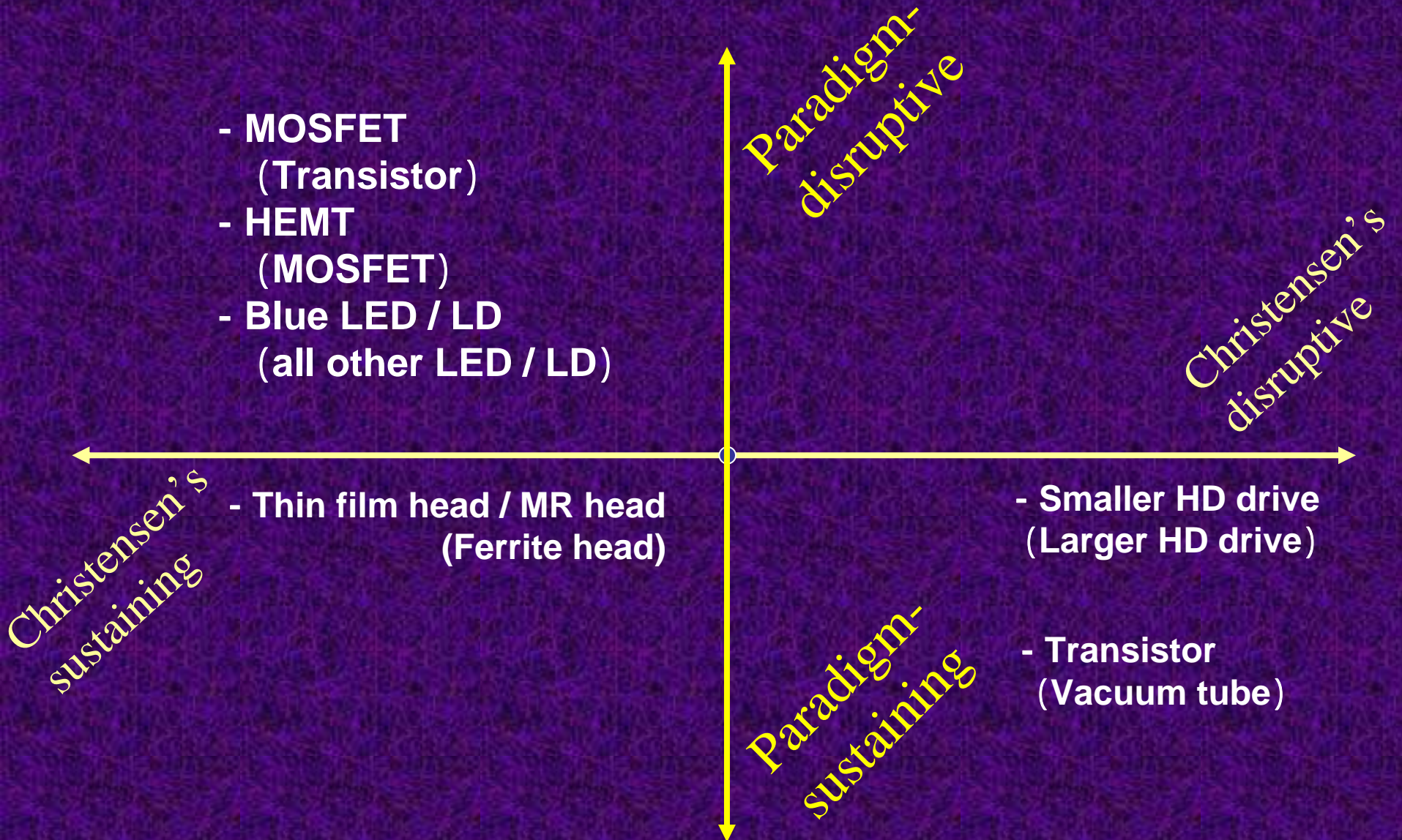
Session 3: Is global alliance feasible to remove the air pollution of east Asia?

1. Set up the goal for removing the world s air pollution and enhance the value of the air resource by 2025, and share this goal landing between Japan and China.

2. To achieve the goal landing, make "the Global Alliance against the Air Pollution" between Japan and China as a world forefront.

3. Under this Alliance, build an international innovation engine, which specifies the sources of pollution and simulates various air pollutions for the long-term future, and make the action plan for the following two;

   (1) Action Plan for applying Japan s new technologies removing sulfurous pollution to east Asian countries.

   (2) Action Plan for transferring automotive technologies removing polluted materials (NOX, PM) from exhaust gases.

4. Design the system to perform the concurrent observation / evaluation for the progress of these action plans.

Innovation diagram: Blue LED

Blue LED technology extrapolated from the current technology (--1997)

ZnSe blue LED

5B$ industry generated (2005) 200B$ light industry will be created in 10 yrs

Ogawa: Decide investment (1993)

The current technology for LED (infrared and red LED)

Nakamura: Go down to the principled knowledge (1989)

InGaN blue LED succeeded (1992)

Nakamura: Challenge to InGaN blue LED

Science (crystal-lography)

Amano, Akasaki, Matsuoka: Challenge to the paradigm disruption

InGaN crystal growth (paradigm-disruption) accomplished (1985-1989)

Knowledge embodiment

Knowledge creation