

L-1

Introduction

AILT1001
Artificial Intelligence Literacy I

Why AILT1001 Matters

Why AILT1001 Matters

You Use AI



Learn · Communicate · Prepare

Why AILT1001 Matters

You Use AI



Learn · Communicate · Prepare

AI Is Used on You



Evaluate · Screen · Select

Why AILT1001 Matters

You Use AI



Learn · Communicate · Prepare

UNDERSTAND
how AI works

USE
it effectively

AI Is Used on You

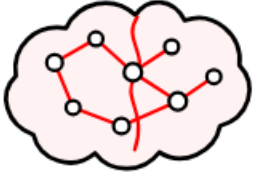


Evaluate · Screen · Select

DECIDE
when to trust it

From Biological Neurons to Modern AI

From Biological Neurons to Modern AI

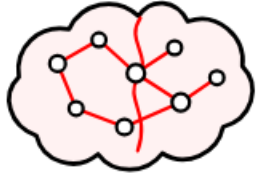


Brain

≈86 Billion Biological
Neurons



From Biological Neurons to Modern AI



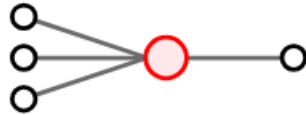
Brain

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Inspired



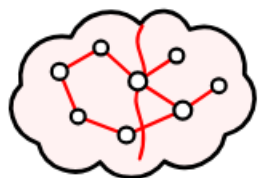
1943



Artificial Neuron

Numbers In → Number Out

From Biological Neurons to Modern AI



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Inspired

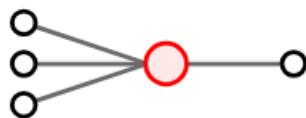


Perceptron

Learns Weights from Examples

1943

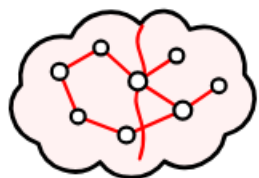
1958



Artificial Neuron

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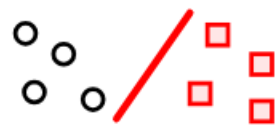
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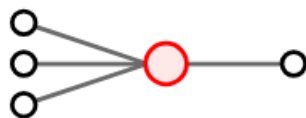
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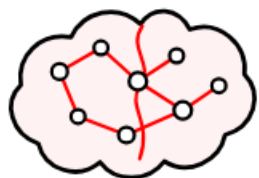
Numbers In → Number Out



Backpropagation

Error Guides Weight Updates

From Biological Neurons to Modern AI



Brain

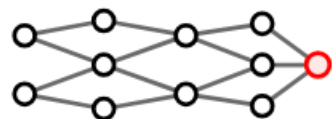
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Inspired



Perceptron

Learns Weights from Examples



Deep Learning

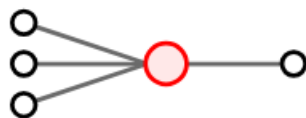
More Layers + Data + GPUs

1943

1958

1986

2012



Artificial Neuron

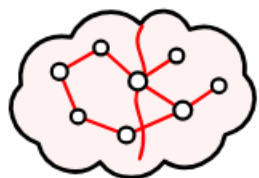
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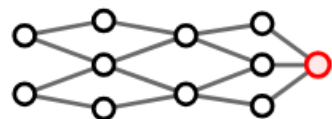
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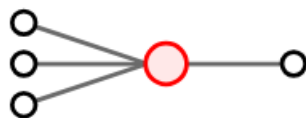
1943

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2017



Artificial Neuron

Numbers In → Number Out



Backpropagation

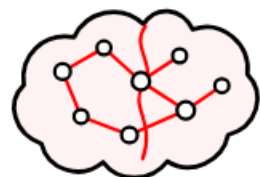
Error Guides Weight Updates



Transformer

Attention Connects Context

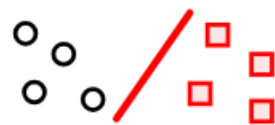
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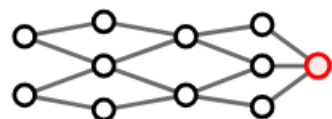
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Inspired



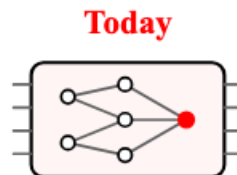
Perceptron

Learns Weights from Examples



Deep Learning

More Layers + Data + GPUs



Modern LLMs

Transformers +
Pretraining + Scale

1943

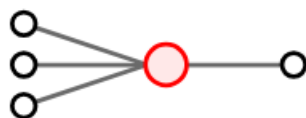
1958

1986

2012

2017

2020s



Artificial Neuron

Numbers In → Number Out



Backpropagation

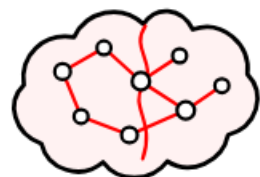
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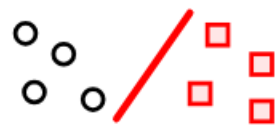
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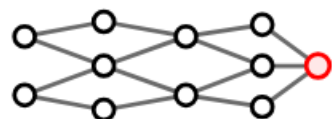
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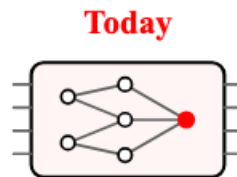
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Deep Learning

More Layers + Data + GPUs



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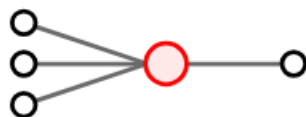
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Artificial Neuron

Numbers In → Number Out



Backpropagation

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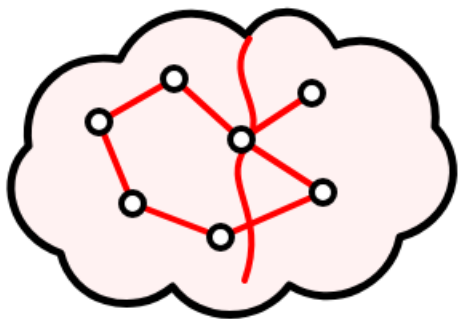


Transformer

Attention Connects Context

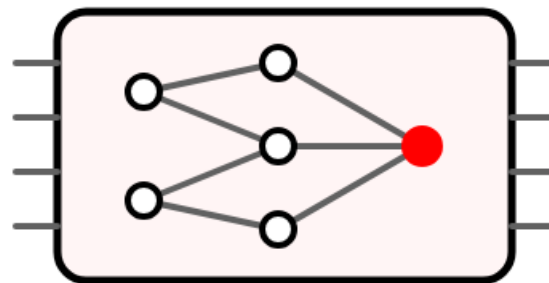
Inspired by Biology. Built from Math, Data, and Computing.

Could a Machine Be Intelligent?



Biological Brain

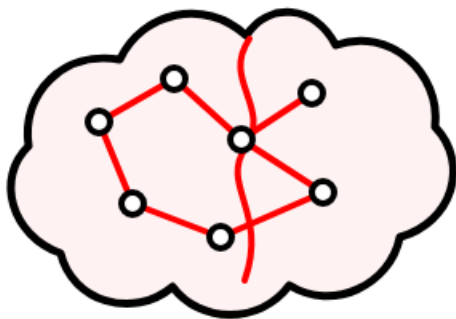
Living neurons,
electrical and chemical signals



Modern LLM

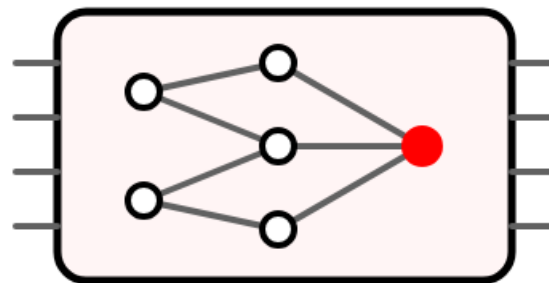
Learned numerical weights;
calculations run on computer hardware

Could a Machine Be Intelligent?



Biological Brain

Living neurons,
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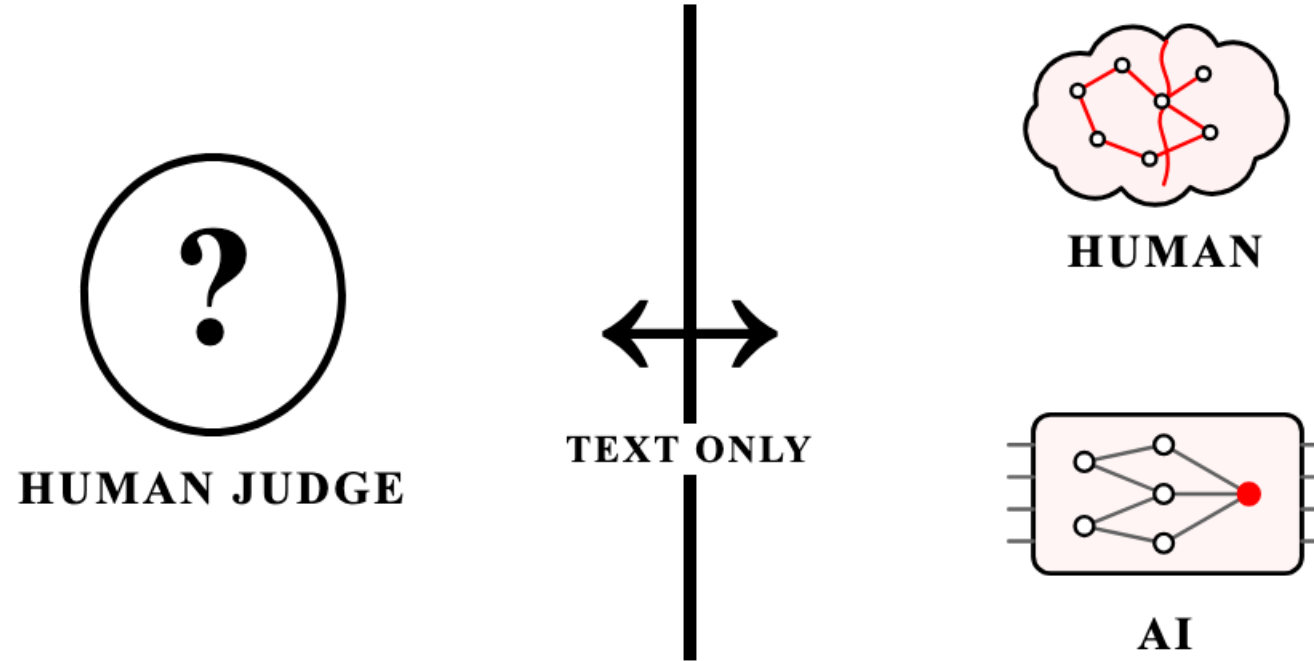
Modern LLM

Learned numerical weights;
calculations run on computer hardware

Can intelligence exist without a biological brain?

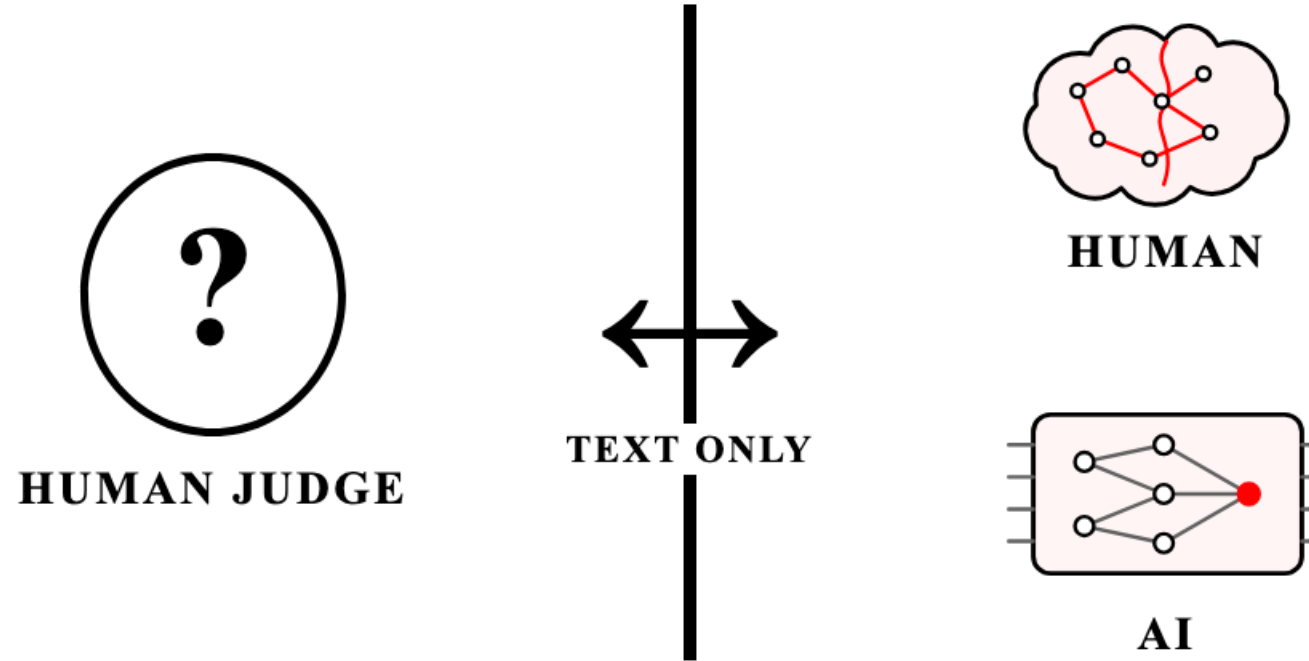
Turing Changed the Question

TURING TEST · 1950



Turing Changed the Question

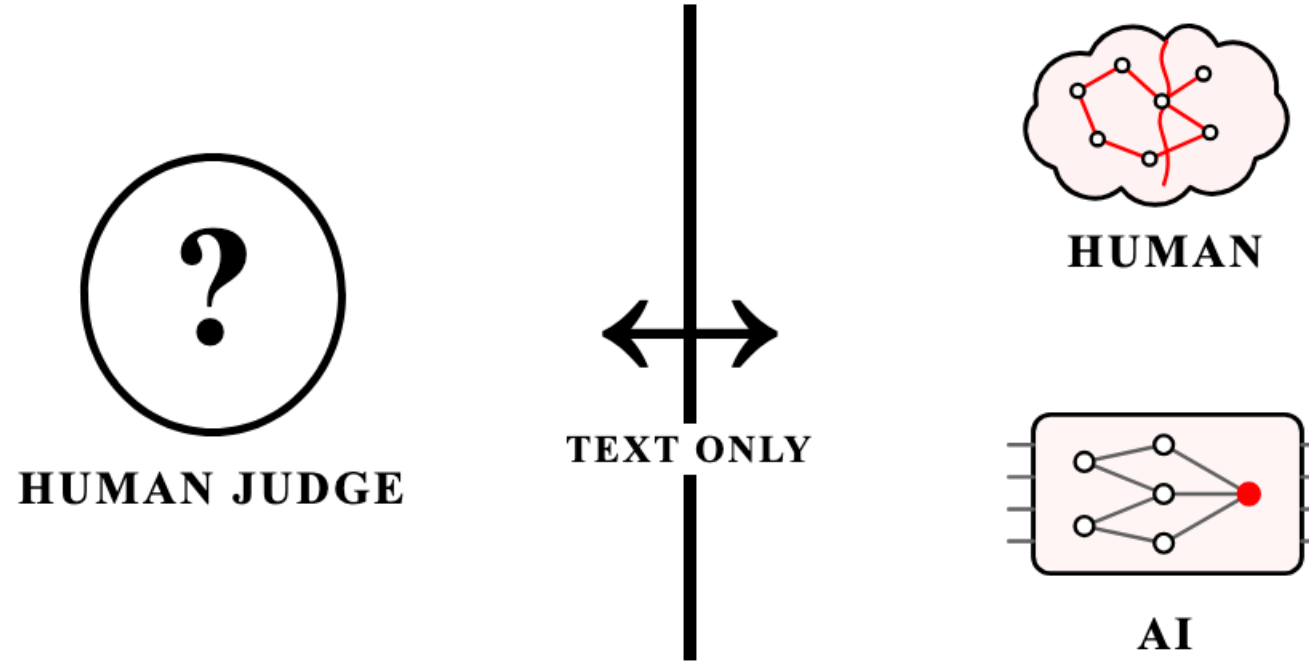
TURING TEST · 1950



Judge cannot reliably tell which is AI → AI passes this test

Turing Changed the Question

TURING TEST · 1950



Judge cannot reliably tell which is AI → AI passes this test

TURING'S IDEA

Judge AI by what it can do.

TURING TEST



**COMMUNICATE
THROUGH TEXT**



PERCEIVE



LEARN



REASON



PLAN

TURING TEST



**COMMUNICATE
THROUGH TEXT**



ACT



ADAPT



CREATE



PERCEIVE



LEARN



REASON



PLAN

TURING TEST



**COMMUNICATE
THROUGH TEXT**



ACT



ADAPT

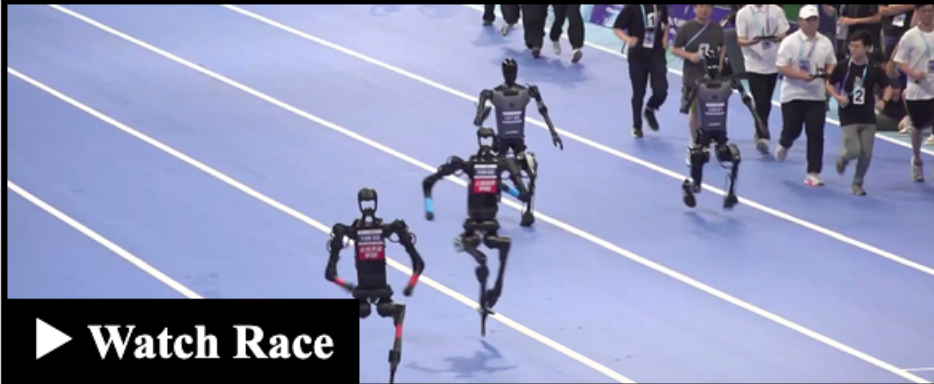


CREATE

...AND MORE

Example: 00 Acting

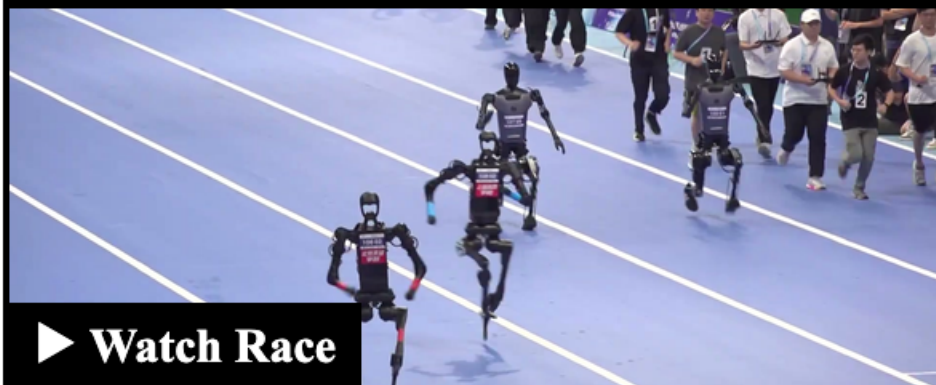
2025



Tiangong Ultra · 100 m

Example: 00 Acting

2025



► Watch Race

Tiangong Ultra · 100 m



2026



► Watch Race

Tiangong Ultra · 100 m final

Example: Communicating

“

Our group meeting went **perfectly**;
we only argued for **two hours**.

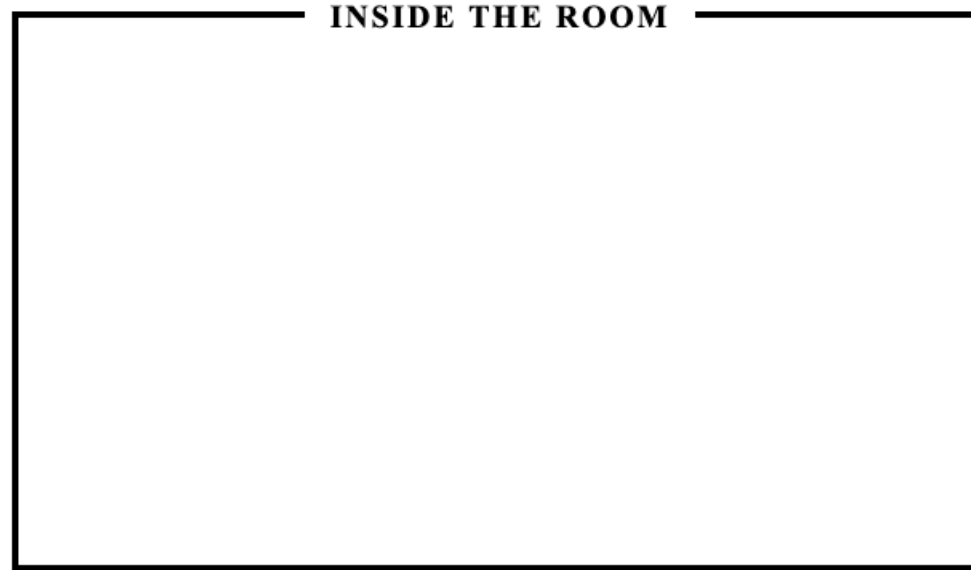
”

What does the speaker **really** mean?

DEMO 1 · ChatGPT

Does a Convincing Answer Prove Understanding?

THE CHINESE ROOM · JOHN SEARLE, 1980



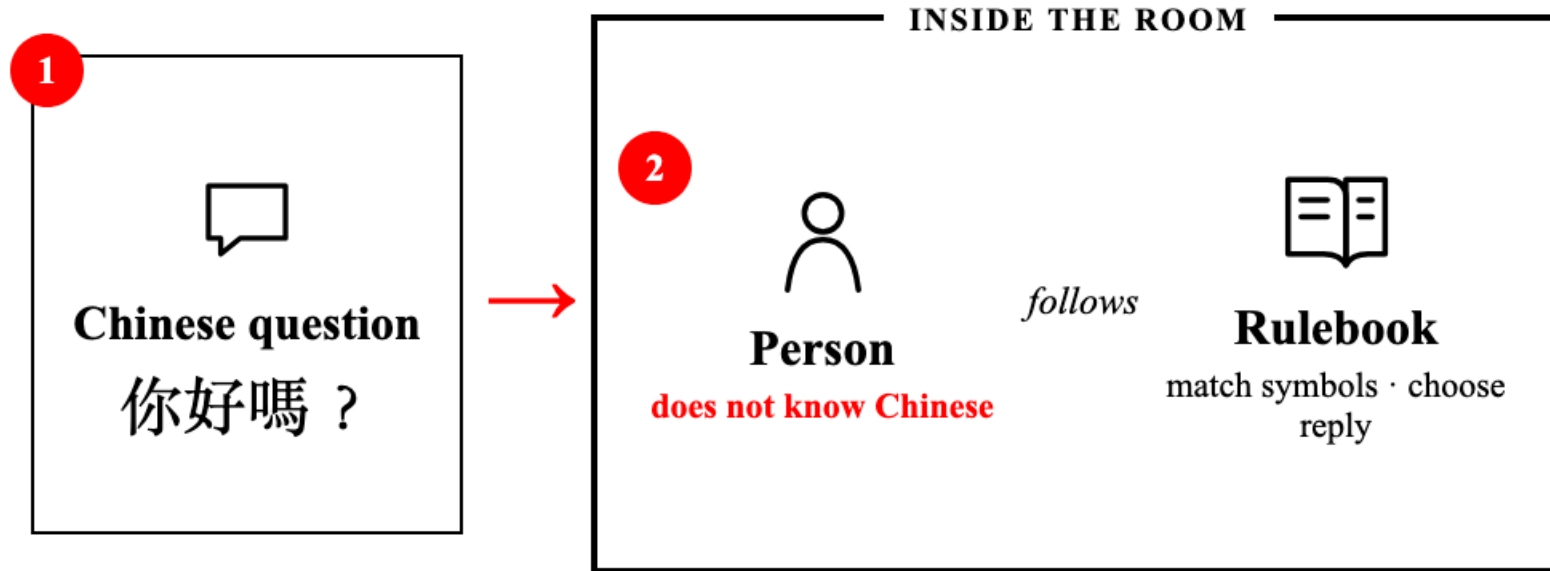
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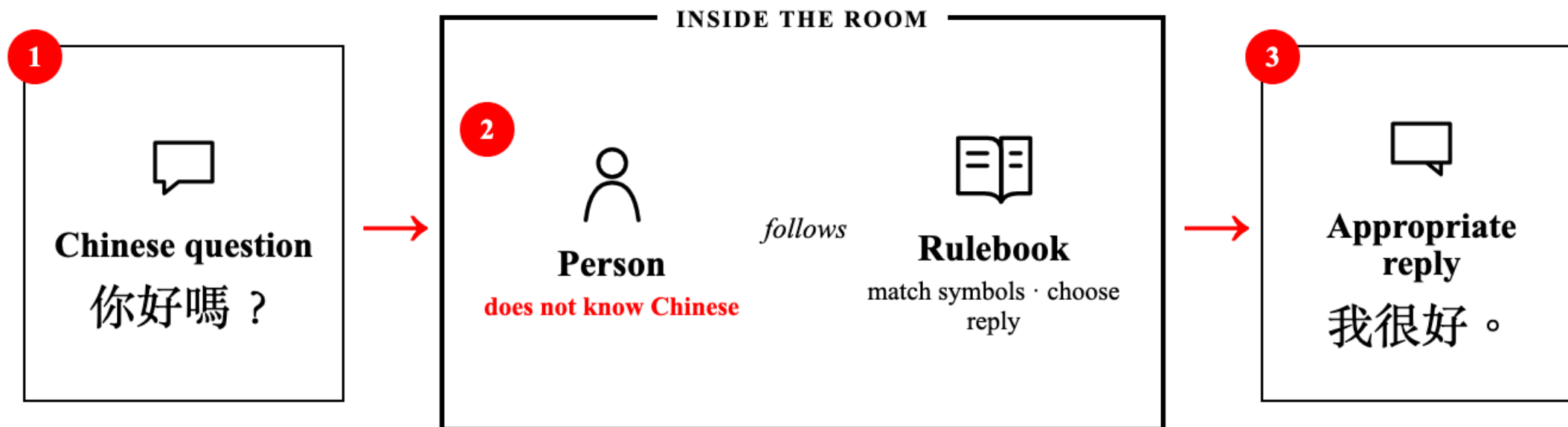
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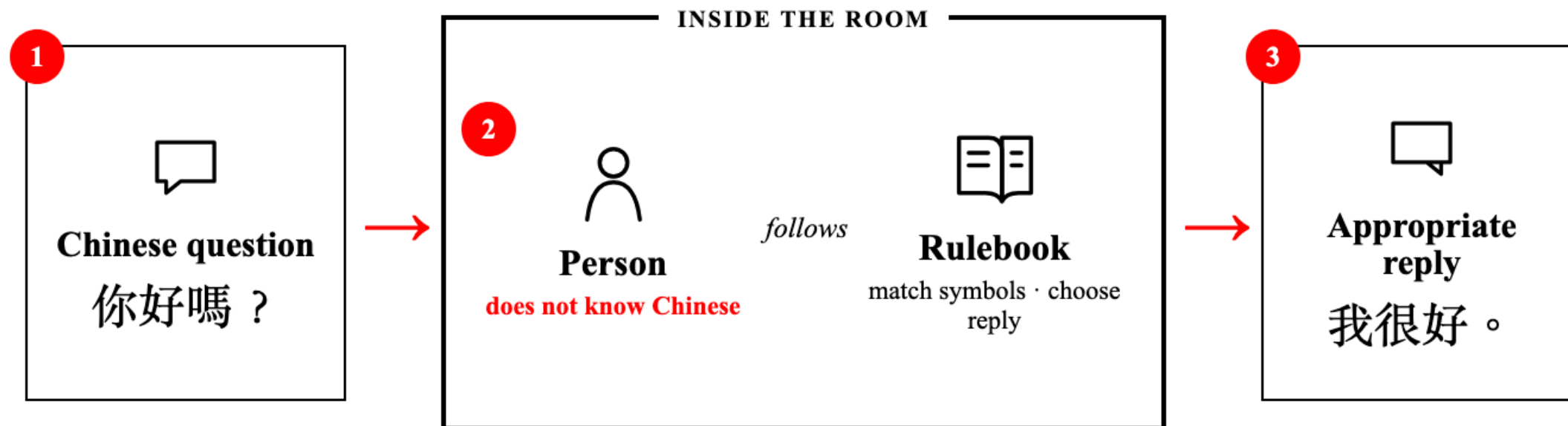
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Does a Convincing Answer Prove Understanding?

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Correct reply $\neq$ proof of understanding

AI Can Help. Should It Decide?

AI Can Help. Should It Decide?



**Draft a Group
Message**

Lower stakes

AI Can Help. Should It Decide?



**Draft a Group
Message**

Lower stakes



**Scholarship
Decision**

Higher stakes

AI Can Help. Should It Decide?



Draft a Group
Message

Lower stakes



Scholarship
Decision

Higher stakes

Higher stakes require stronger evidence, stronger checks, and someone responsible

Moodle + Ed

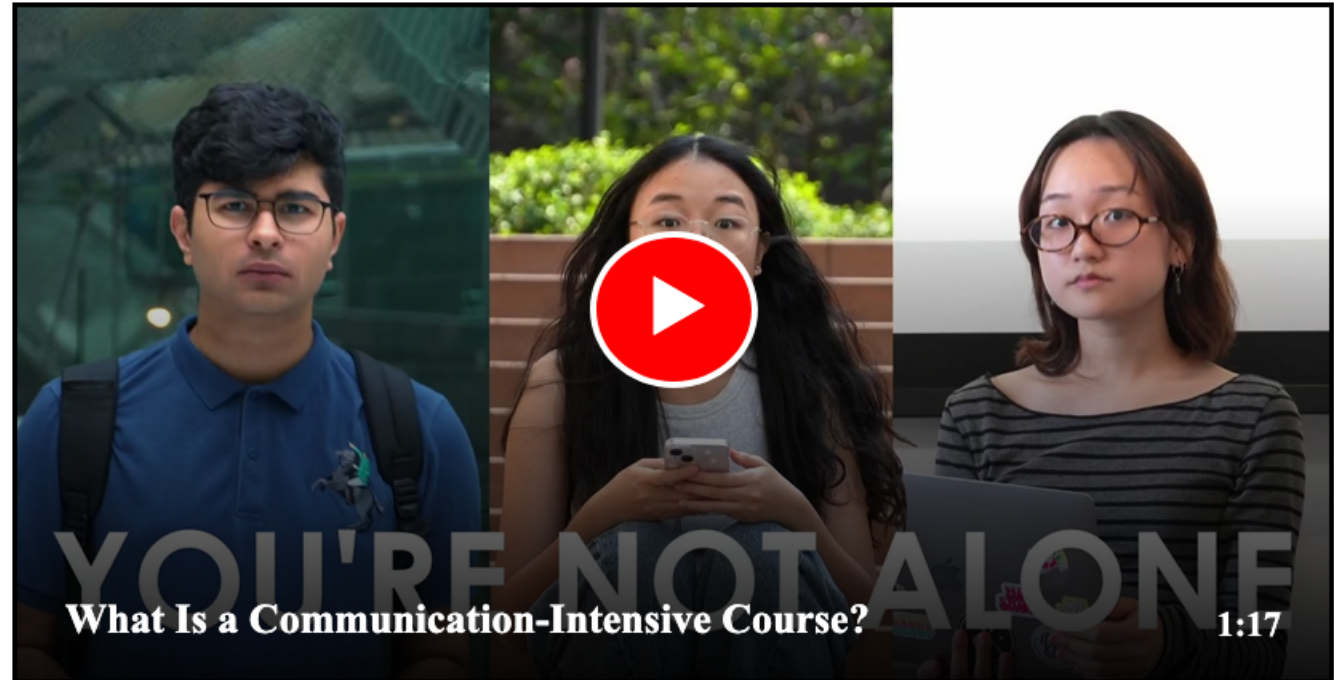
DEMO 2 · Get Connected

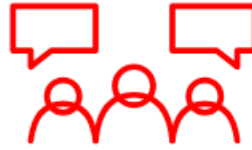
ailt.cds.hku.hk

DEMO 3 · Know the Course

AILT1001 Is Communication Intensive

OFFICIALLY BADGED AT HKU





1 Moodle



2 Ed



3 Scan



4 Submit

ACTIVITY · EXIT TICKET